THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

VOL. IX NO. 50. CLEVELAND. O.. DECEMBER 15 1887. $2.00 PER ANNUM SINGLE COPIES 5 CENTS

Det Bel Isle & Windsor Ferry Co 67

AROUND THE LAKES.

CLEVELAND.

The combination of leading ship builders and drydock owners of the chain of lakes was formed here recently represent Cleveland, Milwaukee, Chicago, Detroit, Trenton, Bay City, and Buffalo. The name selected was the Inter-lake builders and repairers' association. Alexander McVittie, of Detroit, was elected president; H. J. Mills, Buffalo, secretary, and John Fitzgerald, Milwaukee, treasurer. The delegates refused to admit reporters to their meeting, and would not say what had been done after they adjourned. The organization is for mutual protection.

The steamer Egyptian is still in the Cleveland dry dock but her repairs will probably be completed by Saturday night, and the schooner Queen City will occupy the dock.

Work has been commenced on the schooner Specular by the Cleveland dry dock company. She will be converted into a steamer with compound engines from the Globe Iron Works Co.

The schooner Chas. Wall was in commission 225 days 82 of which were spent in various ports, 143 days from time of sailing until time of arrival, between ports less 23 days time lost in the rivers, heavy weather, etc. She carried eighteen cargoes as follows: Four cargoes of grain, 160,000 bushels; eight cargoes of coal, 9,278 tons; six cargoes of iron ore, 6,739 tons.

Thomas Haig of the steamer R. R. Rhodes is on his way home to Monroe Center. Mr. Haig does not know whether he will sail any more or not as he was one of the lucky ones in the last draw of the Louisiana lotterry, realizing $10,000. It is safe to say that Mr. Haig knows how to invest it.

Meteorological summary for the week ending December 14:

Mean barometer	30.12
Mean temperature	38.8
Mean humidity	80.7
Total precipitation	.36
Prevailing direction of wind	S. E.
Total wind movement	1408
Av. cloudiness	7 0
Av. state of weather	Fair.
Max. temperature, highest	48 9
Min temperature, lowest	26 8

W. H. HAMMON, Sergt. Signal Corps, U. S A.

BUFFALO.

Interesting disclosures were made in the trial of John Kennedy, accused of disposing of grain stolen from cargo over runs at the Richmond elevator. George Emslie, former superintendent of the elevator, swore it was quite common in all city elevators for men in his capacity to buy wet grain, dry it, and work it into cargoes, taking out, at the same time good grain instead. In this way there was soon a large amount of good grain in the superintendent's hands. If a canal cargo was too large for the boat the superintendent bought the extra amount of the captain and later took his chances of getting off with the consignee at the end of the route. Kennedy, in his own defense, tells a very straight story.

On account of open weather Superintendent Dobbins, of the life saving district of Lake Erie and Ontario, issued orders not to lay up stations till December 15. They would otherwise have been closed five days sooner.

It is very likely Lake Superior Transit Co. will have some new steamers for their line next season. The matter is now in the hands of the officers of the companies comprising the line.

The Western Transit Co. of Buffalo and the Boston Marine insurance company have begun suit in the United States court against a number of persons living in and around Cheboygan to recover the value of 5,000 barrels and 10,000 sacks of flour, fifty tierces of lard, and other goods and merchandise cast overboard from the propeller Albany while stranded near the foot of Bois Blanc Island on November 24 last. The cargo of the vessel was abandoned by the owners to the insurance company, as a total loss, and the underwriters are held for the same and are legally entitled to its possession. It is asserted that while the crew of the vessel were throwing a portion of her cargo overboard to lighter her, the persons against whom suit is brought gobbled up a large quantity of it and refused to surrender the same. The Boston Marine insurance company has become liable to pay under certificates of insurance on the cargo about $25,000. The entire cargo of the Albany was valued at $75,000. Deputy marshals left at once to secure the merchandise.

The Northerner, the last boat of the season, arrived safely at four o'clock Tuesday p. m. She was detained nearly two days in the rivers, but otherwise made especially good time, quite as good as she could have made in midsummer. This makes 105 vessels to lay up here against 112 last year. As there are more propellers in proportion, and fewer schooners, the actual tonnage is probably greater than last year.

Hingston & Woods' dredges were at work on the new shipyard water-front at Black-Rock this week preparing a way for the launching of the propeller Saginaw Valley, which is to be lengthened there this winter.

Work on the rebuild of the schooner L. Seaton at the Mills drydock will begin early next week. She is waiting for the ferry propeller Steinhoff to get out of the dock, and the schooner John M. Hutchinson also precedes her.

The new boiler for the propeller D. J. Foley and the compounding of her engine are just now engrossing the attention of her owner, Captain Godman. Work will begin soon.

The propeller J. E. Gilchrist and her consort, the Alverson, when unloaded, were found to have no wet grain in spite of their experiences on Lake Huron and the ice of Mud Lake. The Alverson over-ran slightly and the Gilchrist was about even.

It is reported that the schooner S. E. Peck was short about 160 bushels on her Detroit wheat cargo.

The work on the breakwater has been finished for the season. It includes 450 feet of new superstructure, part in concrete and part in concrete faced with stone. The two styles were chosen as a matter of experiment, and both will be closely watched to see which proves the most durable. Of late the work has been confined to repairs of the adjoining wooden superstructure, which is now pronounced in as good shape as it can be made without rebuilding. Considerable iron has been used in the work, yet it is not pretended that it will stand all sorts of weather any great length of time. There is 1,500 feet that badly needs rebuilding. The heavy storms are likely to make breeches in it, as they have done before, and more than that, the half-rotted timbers are hardly sufficient to hold up the immense mountains of ice that often accumulate there late in the winter. As to prospects, it is reported that there is already a movement on foot in congress looking to the repassage of the river and harbor bill of last session as an emergency measure. It is stated that the president confesses to some misinformation in regard to the subject, and is sorry he vetoed the bill. Should this bill, or any favorable modification of it, become a law during the winter, there will be a large amount of work done on the breakwater next summer, but if the regular bill at the time of adjournment must be waited for, nothing can be done.

The vesselmen are anxious to see the fog bell on the breakwater replaced by a whistle, and say that but for the tugs at the breakwater replying to the signals of approaching vessels, disasters would certainly occur. Vessels arriving, with the southwest wind blowiug report that the bell could be heard only a few rods lakeward.

"One thing is going to happen some night," said the government engineer, "and that is some disaster resulting from the foolish policy of leaving the breakwater light in charge of one man. Something is going to happen to him some night in a storm and the light will go out. They keep two men on the dummy, and why shouldn't they on the breakwater?" Superintendent Dobbins was asked if his life-saving lookout would discover the fact if the light went out, and replied that he would, but there had been friction between the life saving crew and a former lighthouse inspector on this very question, and he was uncertain what would be done at the station if the light was discovered to be out. On one or more occasions, several years ago, the pier light went out, and the inspector objected to the life-saving crew interfering.

CHICAGO.

Special to the Marine Record

The Vessel Owners towing Co., Dunhams Towing Co. and the Chicago Towing Co., commenced a pool December 12th, each line running one tug. After December 16th, full tariff will be charged for towing. Captain Robert Todd for several years commander of the schooner John M. Hutchinson arrived in Chicago Saturday last, to take charge of the steamship John B. Lyon, which he will command next season.

It took the united efforts of two of the most powerful tugs in Chicago, to tow the fine barge David Dows, to the dock at Hedstrom's coal yard at 31st street, where she arrived last Saturday morning, to unload after waiting several days near Rush street bridge for the water in the river to raise. The barge, Geo. W. Adams was also towed to the South side, gas house dock on Saturday. Several large vessels have been unloading coal during the past week and some are waiting their turn to unload. The steamship John B. Lyon completed unloading on Saturday, at a coal dock just north of North Halstead street bridge, in Ogdens canal. The steamship Iron King took her place and the steamships Portage and Australasia, are waiting to unload at the same coal yard. The schooner C. P. Minch is unloading at a coal yard north of Division street bridge, nearly all will have their loads out this week.

At Miller Bros.' shipyard the steamship W. A. Haskell was in dock for part new stem and stem iron; the steambarge C. H. Green for some new plank in bottom and calking; the steamship Geo. Spencer for general repairs and calking; the schooner Negaunee to have her bottom calked; the tug Satisfaction for heavy ironing for winter service in the river; the tug O. B. Green was at the derrick to have her boiler taken out; the Wallula for repairs to her stern bearing; the steamship W. J. Averill will go into dock for recalking; the steamship Ira H. Owen to have her wheel tightened.

James and John Corrigan, vessel owners, of Cleveland, are in Chicago, looking after their fine fleet, lying up at this port.

A large number of the captains and mates of the big fleet, which go into winter quarters here, have gone to their homes, but a large force of engineers are still with us and are hard at work, getting the engines and machinery on their boats in good shape for the winter, before they return home to spend the holidays with their families and friends.

The small schooner Fleetwing, of Charlevoix, which registers only 39 tons, arrived here Sunday morning with a load of hard wood lumber from Charlevoix Captain J.H. Wilson, who commands her, says he experienced very good weather, and would have been glad of more wind.

Captain John Perene, late of the steamship John B. Lyon, will command a fine new steamship, building at Cleveland, for the owners of the Lyon, when she is completed.

Captain F. H. Rae, of Vermillion, has laid up the steamship R. P. Ranney at thir port in good shape. She has been running between Duluth, Ashland and Lake Erie ports during the past season, and good luck has attended her all through.

Jacob Johnson and William Deane have purchased the hull of a tug from Hanson shipbuilder, Manitowoc, of the following dimensions: Length over all 78 feet, breadth of beam 16½ feet, feet. Captain James Carter and two men left Manitowoc with her Wednesday noon, in tow of the Goodrich Co.'s steamer City of Ludington, for Chicago. The machinery and boiler of the tug L. B. Johnson, of this port, will be put into her, and she will be added to our already fine list of tugs next season.

Captain Ira H. Owen, who has been suffering from a very serious attack of pneumonia for the past ten days, is improving slowly and hopes are entertained of his recovery.

A large force of men are employed pulling down and carrying away the material of the old warehouse of the Anchor Line Co., facing on to the river front, between Wells street and La Salle, on the site of which the company will build a splendid new four-story warehouse, with basement, which will have a frontage on the river of 240 feet, and will be 190 feet deep. It will be fitted up with elevators, automatic fire alarms, and every modern improvement tending toward making it a first class building. It will cost about $90,000.

At the Chicago Drydock Co.'s docks the schooner Higgie went out and was replaced by the wreck of the schooner Phœnix, which was towed up the river by the tug T. T. Morford from the Central slip, where she had been lying since she was towed into port. Some weeks ago, the cargo of lumber in her hold prevented her from sinking. This will be taken out, and if she is worth repairing, repairs will be made on her.

The bids for a tug to do the work at the water works crib during the winter were opened at the board of public works Wednesday morning. Following are the names of the tugs and their owners' bids: T. T. Morford, $800 per month; J. H. Hackley, $700 per month; Chicago, $600 per month; Kitty Smoke, $450 per month. The Kitty Smoke is not a Chicago tug although at present laid up here, and it remains to be seen whether the city authorities will accept the lowest bid.

We are much pleased to note that Mr. Louis M. Houseman, marine reporter for the Chicago *Inter-Ocean*, was presented on Tuesday by his many friends at this port with an elegant gold star with diamond setting, and also a very fine gold watch. Mr. Houseman has gained lots of friends during his first seaaon as marine reporter by his courtesy and his endeavors to maintain the dignity of our port.

WILLIAMS.

MILWAUKEE.

Special to the Marine Record.

The shipyards here are enjoying a boom so far as plenty of work goes. The following work is being done at Wolf & Davidsons: The propeller Waverly has been thoroughly repaired of all damage sustained while endeavoring to make a passage through Milwaukee North Point to Peter Klein's dock, the tug S. S. Coe, is receiving a new stern and general overhauling, with M. O. Parker as supervising architect, F. Maxon, alternating. The steamer Colin Campbell, gets a new bow and general repairs to damage caused by thi king she had the right of way over the north pier at Manistee; the propeller Wisconsin, is in drydock for a new wheel and repairs to her stern bearings; steamer Huron City, is awaiting her turn to be docked for a through rebuild; propeller Roanoke, No. 1 will also be docked and be extensively repaired; the iron steamers Westover and Roanoke have been let out of dock and will soon have their repairs completed; the new steamship Thomas Davidson is progressing rapidly and will be ready to go at the opening of navigation; the I. O. T. Co.'s fleet are receiving their annual overhauling.

At Wolf & Davidson's shipyard the steamer Waverly is to be floated out of the stationary dry-dock this evening, thoroughly repaired. Her place will be taken by the steamer Wisconsin, which is to receive new brasses. The tug S. S. Coe is on the boxes having her stern rebuilt. Repairs upon the Colin Campbell will be completed by Monday evening.

Among the late arrivals is the steamer Geo. T. Burroughs and schooner Challenge, with wood. The Challenge will now lay up for the winter.

The only tugs in commission here at present are the Welcome and Bues.

The slabs are being removed from the hold of the stranded schooner Abbie, at Sheboygan, preparatory to hauling her out on the beach for repairs.

The winter cometh and the Whales cometh with the winter and they glue their backs to the steam pipes and wax fat in the body (but not in pocket around here.) The meeting opened on the 12th with Bro. Jameison, in the chair. Subject the tarift, and if ever a poor tarift got handled in a systematic manner without gloves it did to-day. Captain John Cochrane, after a brilliant speech of two hours duration gave his audience the impression that the tariff was not high enough, and the masterly manner in which he emphasized his remarks by waving a hand clad with a diamond ring made them all feel that it should go higher. Captains McGregor and Henry Leisk followed with their ideas neat and accurate, Captain James Leisk orated clearly and consisely. In the meantime Chairman Jameison went to sleep and the chair fell over with him. Captain Jamison has lived high this season. Can't see a fishbone protruding through his hide anywhere; in fact I think I can safely say that he has become corpulent and the chair refused to part from him until a cross cut saw, a spike maul and a wedge had been procured from the yard, when he was released none the worse for his experience but the chair was ruined. After getting himself together he resolved that the aforesaid Whales dratt and present to President Cleveland an amendment to his message on the tariff. Captain James Calbick sang, the "Ship that never returned," Steve Smith searched the gang to see that they had no clay pipes concealed. The whistle blew and all adjourned to meet next week. CAPTAIN KIDD.

MARINE CITY

Special to the Marine Record.

Marine City received about her usual number of vessels and steamers for winter quarters.

The splendid new steambarge Miami, built here this summer, was towed to Port Huron on the 12th inst. to receive her machinery at the Phœnix Iron Co.'s Works. The Miami's dimensions are as follows: Keel, 130 feet; over all, 142 feet; beam, 27 feet 6 inches; depth of hold, 8 feet 10 inches. Two spars with pilot house forward. Steeple compound engine, high pressure 16 inches, low pressure 30 inches, with 26-inch stroke, built by the Phœnix Iron Works, Port Huron; 8-foot Trout wheel; Otis steel boiler 7 feet 6 inches shell, 14 feet long, allowed 120 ponnds pressure; steel arched and built of the choicest timber, by the T. & S. T. Co. She will be commanded by Captain J. C. Miller, our Marine City marine collector and harbor master. We think the Miami is one of the finest steambarges ever built at this port. We wish Captain Miller every success.

The steamers City of New Baltimore and Hattie are the only boats plying between here and Detroit. Both are doing a good business.

The fast sailing steamer Mary continues on her route to Algonac, making daily trips.

Any marine matters that parties would like to know about on St. Clair river will be furnished by addressing McNiff & Son, steamer and vessel owners. Any one in arrears for range lights at St. Clair Flats for 1886 and 1887 will please remit to box 630, Marine City, Mich.; also, officers in arrears for MARINE REORD, and postage stamps.

MCNIFF & SON.

HARBOR MASTERS' DUTIES.

NO. 179—AN ORDINANCE regulating the duties of the harbor master, defining the harbor and the regulations of the same, and to repeal sections 392, 394, 395, 396, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420 and 421 of the revised ordinances of the city of Cleveland.

SECTION 1. Be it ordained by the common council of the city of Cleveland that at the first regular meeting of the city council, after the first Monday of April annually, there shall be appointed by the council one harbor master, who shall hold his office for one year and until his successor is appointed and qualified. Before entering upon the duties of his office he shall take the oath required by the laws of the state, and give bonds, with good and sufficient surety to the satisfaction of the council, in the sum of two thousand (2,000) dollars, conditioned for the faithful performance of the duties of his office. He shall receive such compensation as the council may from time to time determine, and may, with the approval of the council, appoint one or more deputies. He shall perform the duties required by this chapter, and such other duties as may be enjoined by ordinance or resolution of the council.

SEC. 2. The harbor shall consist of such portion of the Cuyahoga river and Ohio canal as are within the city limits, and such portion of Lake Erie (including the waters to the "government breakwater") as lies adjoining to, and extending one mile into the lake, between the east and west lines of the city; also the ship channel and old river bed improvements, as defined in the original map and surveys of Ahaz Merchant, originally designed and prescribed by ordinace, shall be a portion of the harbor of the city of Cleveland, and all the territory embraced within the limits of said survey as aforesaid, shall be a portion of the harbor of the city of Cleveland, and shall be subject to the control of the harbor master, and to all the rules and regulations of this chapter, or which shall hereafter be provided by he city council.

SEC. 3. It shall be the duty of the harbor master to report to the board of improvements any and all encroachments upon the harbor lines, as established by ordinance of city council, or which may hereafter be made, and thereupon they shall take such action as may be necessary to enforce the provisions of this chapter.

SEC. 4. The harbor master is hereby authorized and required to give such orders and directions relative to the location, change of place or station, the manner of moving in the harbor of every vessel, craft, or float, lying, moving or laid up in the harbor, as may be necessary to promote order therein and the safety and equal convenience of such vessels, craft or floats. The authority and jurisdiction of the harbor master is hereby extended to all steamboats, vessels, craft or floats entering, navigating or lying in any slip within the city of Cleveland, and all penalties prescribed in this chapter for a violation of regulations, or disobedience of the orders or directions of the harbor master, are hereby made applicable to the owners, masters or other persons having charge of such steamboats, vessels or other crafts or floats, and may be imposed in the same manner and to the same extent as is prescribed against owners, masters or other persons in charge of steamboats, vessels and other crafts or floats within the limits of the harbor. And any owner, master or other person having in charge the same, who shall refuse or neglect to obey any such order or direction, shall, on conviction thereof, be fined in any sum not less than ten dollars ($10,) nor more than fifty dollars ($50,) for each any every offense.

SEC. 5. No person or persons shall unload any boat or vessel at, on or in any of the public wharves, docks, bridges or public grounds of the city or otherwise place or deposit on any such wharf, dock, bridge or public ground any stone, lumber, timber, firewood or other material without permission from the harbor master; nor shall any owner, master or other person having in charge any steamboat, or other vessel, craft or float fasten or lay or cause to be fastened or laid any steamboat, vessel or other craft or float to any private or public dock, wharf, bridge or public grounds of said harbor after having been forbidden by the harbor master.

SEC. 6. If any steamboat, vessel or other craft, in making or leaving the harbor be in distress or danger and obliged to anchor outside the harbor; or if any steamboat, vessel or other craft by anchoring inside the piers or other part of the harbor, or by winding or other cause shall get foul and obstruct the navigation or passage of other boats or craft, the harbor master shall have power and is hereby authorized to order to its assistance men, boats and tackle from any other boat or craft in port, unless such vessel or craft contemplates immediate departure from port or shall depart within thirty (30) minutes after having been called upon for such assistance, or any tug lying in the harbor. Every master or officer of such boat, craft or tug shall render the assistance so ordered; and every master or officer shall receive such assistance when his vessel obstructs the passage of any other vessel. Any steamboat, vessel or other craft or float receiving such assistance shall pay to the person or persons rendering the same any sum fixed by the harbor master not exceeding fifty (50) dollars.

SEC. 7. No owner, master or other person having in charge any steamboat, vessel or other water craft or float shall anchor or otherwise fasten or permit to be anchored or fastened any such steamboat, vessel or other water craft or float in the harbor so as to obstruct the passage of any other steamboat, vessel or other craft or float in coming into or going out of said harbor. No such steamboat, vessel, or other craft or float shall make fast to any pile driver as a fender to either the east or west pier.

SEC. 8. No steamboat, vessel or other craft shall make fast to or lie alongside of another or lap one another in that portion of the harbor between Center street bridge and the north end of the government piers, or from four hundred (400) feet west of the Willow street bridge to the Cuyahoga river contrary to the orders of the harbor master. It shall also be unlawful for any mud scow, flat boat, dredge or any such crafts to be placed or laid alongside of another while lying at the docks or wharfs of the harbor during the navigable season of the year, except at the head of the river or old river bed, without first having obtained permission from the harbor master.

SEC. 9. No person or persons shall throw or deposit, or suffer to be thrown or deposited in the harbor, or any part thereof, any earth, asher or other heavy substances, filth, logs or floating matter of any description, or any obstructions; nor place any such material on the banks, wharves, docks or piers of said harbor, in such position as to be liable to be washed off or otherwise conveyed into said harbor; nor make or direct any channel for the passage of water so as to carry such material into the harbor; nor shall any person or persons place or deposit, or cause to be placed or deposited, any such materials upon any dock, wharf, pier, bank, vessel, boat or float, without a good and sufficient preventive against such materials falling into the harbor.

SEC. 10. No person or persons shall drive or place, or cause to be driven or placed, any pile or piles, stone, timber, earth, or other obstruction in the harbor of the city, without permission from the common council, or by direction of the board of improvements for public purposes; nor shall any person or company use the piers of the harbor erected by the government of the United States without the permission of the agent of the United States for said piers, or the board of improvements.

SEC. 11. Any person or persons violating any provision of either of the last six sections of this chapter shall, on conviction thereof, be fined in any sum not less than twenty-five dollars ($25) nor more than fifty dollars ($50) for the first offense, and seventy-five dollars ($75) for each and every subsequent offense.

SEC. 12. Every owner or owners, occupant or occupants of premises abutting on said harbor, shall at all times keep the wharves and docks on said premises in good repair and safe condition; and every person violating any provision of this section shall, on conviction thereof, be fined in any sum not less than twenty dollars ($20) nor more than fifty dollars ($50) for every day said violation shall continue; and shall also be held liable for all damage to persons or property by reason of such unsafe condition of said wharves and docks.

SEC. 13. All steamboats and vessels, while in the harbor, shall keep their anchors inboard, and their lower yards cockbilled, and their upper yards braced up sharp; and in entering or leaving the harbor shall be moved slowly and under a low head of steam or short sail, so as not to endanger any other vessel. All steamboats, vessels, canal boats, or other water crafts shall keep outboard, during the night, a conspicuous light; and shall have extinguished, or secured safely, at dark, all fires that may be kept on board. Any owner, master, officer, or person having any of said water crafts in charge, violating any provision of this section, shall be liable to a penalty, on conviction thereof, not less than ten dollars ($10) nor more than fifty dollars ($50) for each and every violation.

SEC. 14. All steamboats, vessels, crafts or floats, while navigating the Cuyahoga river or old river bed, shall in no case be moved at a greater rate of speed than four (4) miles per hour except in case of fire or distress; and in case of a fog the rate of speed of such steamboats, vessels, crafts or floats shall not exceed two (2) miles per hour in any part of the harbor. Any owner, master, or other person in charge of any steamboat, vessel, craft or float, violating any of the provisions of this section shall be fined in any sum not less than thirty dollars ($30) nor more than fifty ($50) for each and every violation thereof.

SEC. 15. All sail vessels, canal boats, dredges, or water crafts or floats not propelled by steam, shall be drawn or towed by a tug or other steam power when moving through any of the bridges over the river; and all docks, wharves, bridges, piers or protections or other place, where person or property is in danger by the fast moving of steamboats or tugs, shall have a blue flag flying in the most conspicuous place thereon, and as near the point of danger as possible, so as to be seen from up or down the river; and at dark a blue light shall take the place of such flag; and any owner, master, or other person in charge of any steamboat or tug running or causing to be run any such steamboat or tug past such blue signal faster than at the rate of two (2) miles per hour, or violating any other provision of this section, shall, upon conviction thereof, be fined in any sum not less than twenty-five dollars ($25), nor more than fifty dollars ($50,) for each and every offense, and shall be held liable for any damage to person or property, sustained by reason of such violation.

SEC. 16. All vessels of any description navigating the harbor are hereby prohibited from dragging their anchors at any point in the Cuyahoga river or old river bed. Any owner, master, officer, or other person in charge of any such vessel, while engaged in the violation of this section shall, on conviction thereof, be fined in any sum not less than ten dollars ($10) nor more than fifty dollars ($50); and shall also be liable to the person or persons injured, for all damages sustained by reason of such violation to the water pipes of the city of Cleveland, or to the gas pipes of any gaslight and coke company or gaslight company, or the wires or cables of the city, or of any person or company having proper authority for laying such wires or cables located within the limits of said harbor. It is also hereby made the duty of the board of improvements to cause suitable sign boards to be erected on each side of said river, indicating the location of said water and gas pipes, or wires and cables.

SEC 17. It shall be unlawful for any person or persons having in charge any raft of lumber, logs or timber, to have more than eight (8) cribs towed in any raft in the harbor; and all such rafts shall be drawn or towed at least fifteen (15) minutes apart while navigating the Cuyahoga river or old river bed; and all lumber, logs or timber making up or constituting such cribs, shall be properly secured, so that the same shall not break adrift. Any person or persons having in charge any raft or rafts, or any owner, master or other person having in charge any steamboat or tug used in drawing or towing any such raft or rafts, who shall violate any provision of this section shall be fined in any sum not less than fifty dollars (50) nor more than two hundred dollars ($200) for each and every offense.

SEC. 18. Any person or persons having in charge any raft of lumber, logs or timber, who shall refuse or neglect to comply with the orders of the harbor master relative to the change of location or removal of the same shall forfeit and pay on conviction thereof, the sum of fifty dollars ($50), and the cost of prosecution. And any owner, master or officer of any tug, propeller or steamboat, leaving any such raft of lumber, logs, or timber, within the harbor, where the same shall be or become an obstruction to commerce shall, on conviction thereof, be fined one hundred dollars ($100) for each and every offense.

SEC. 19. Any tug, propeller or steamboat having in tow any raft of lumber, logs or timber, and making or entering the government breakwater, shall tow such rafts to such place in said water, so as not to obstruct or interfere whatever with any vessel, craft or float desiring to enter and anchor in said breakwater. And it is hereby made the duty of the harbor master to cause the removal of any such rafts when the same so obstructs any vessel or craft, and the cost of such removal shall be chargeable upon the property so removed, and may be collected of the owner thereof. Any owner, master, or other person, having in charge any such tug, propeller or steamboat, letting go of such raft or rafts in said breakwater and causing such destruction, shall be fined, on conviction thereof, any sum not less than twenty-five dollars ($25) nor more than one hundred dollars ($100) and the costs of court incurred by reason of said violation.

SEC. 20. It shall be unlawful for any owner, master or other person in charge of any vessel, craft or float entering the government breakwater to anchor any such vessel, craft or float within two thousand (2,000) feet west of the entrance thereof; (said two thousand (2,000) feet being designated by a beacon or pole erected on the northerly line of said breakwater.) Any owner, master, or other person, having in charge any such vessel or other craft or float anchoring the same within the limits of the breakwater as above described, shall immediately cause such vessel, craft or float to be moved above said limits, and in case of refusal or neglect on the part of the owner, master or other person having in charge any such vessel, craft, or float to comply with the removal of such vessel, craft or float, as aforesaid it is hereby made the duty of the harbor master to cause the same to be so removed at the expense of such owner, master, or other person in charge. Any owner, master or other person having in charge any vessel, craft or float violating any provision of this ordinance shall on conviction thereof be fined in any sum not less than twenty-five dollars ($25) nor more than fifty dollars ($50) for each and every offense.

SEC. 21. No person or persons in charge of any propeller, tug, or steamboat shall blow her whistle while occupying the draw of any bridge in the city, or within one hundred and fifty (150) feet thereof unless the same shall be blown by a steamer, propeller or tug lying at a dock as a signal for the opening of the next nearest bridge, or when required by the laws or regulations of the United States; for each violation of this section a penalty of not less than fifteen dollars ($15) nor more than fifty ($50) is hereby imposed, which penalty may be collected of the person blowing such whistle or causing the same to be blown, or of the master, owner, or owners of such steamboat, propeller, or tug. Provided, further, that this section shall not apply to cases of fire or distress.

SEC. 22. No steam vessel, while lying in the harbor or along the wharves or docks of the same, shall work its engine to exceed ten (10) minutes previous to leaving the harbor, or moving from one dock to another, without the permission of the harbor master. Provided, that owners, masters, or other persons in charge of new boats just launched, or boats fitting out and desirous of working and testing their engine, shall, before working or testing such engine, station some person in such a place or position so as to signal the engineer to stop such engine at least 200 feet from an approaching vessel, craft or float, and said engine shall be kept from working until such approaching vessel, craft or float shall have passed the wheel of said new boat, or boat fitting out, a distance of 200 feet. This section shall not apply to cases of fire. Any person or persons violating any provisions of this section, or order of the harbor master relative to the same, shall be fined, on conviction thereof, any sum not less than twenty (20) dollars nor more than fifty (50) dollars and the cost of court; and shall also be liable for any damage to person or property sustained by reason of such violation.

SEC. 23. Whenever it shall become necessary in the judgment of the city council, to cause the removal of any obstruction which has heretofore or shall hereafter be placed within the limits of the harbor, as defined in the map of survey and ordinance establishing the same, the said council shall cause an order to be made requiring the removal of such obstruction and thereupon it shall be the duty of the board of improvements to cause written notice to be served upon the owner or owners of any lots of land bounding or abutting upon the said harbor line who may have caused such obstructions therein, or who may have permitted any such obstruction to remain in front of their said lots, requiring all such persons to remove the same without delay; and if such person shall neglect or refuse to remove or cause the same to be removed within a reasonable time after receiving notice of the same, it shall be the duty of the board of improvements, upon the order of the council, to cause the said obstruction to be removed and the expense thereof may be recovered from the said owner or owners in a civil action before any court of competent jurisdiction within the city of Cleveland.

SEC. 24. All public landings, and all streets bounding and abutting (or the termination thereof), upon the harbor line, as before specified, or upon the line of survey of the ship channel and old river bed, or upon such portion of the Ohio canal, or Lake Erie as lies within the limits of the city of Cleveland, at or upon which no bridges exist shall be constructed by the authority of the city council, are hereby designated and set apart as public landings, and as such are to be under the control of the harbor master or such other officer as the council shall provide, under such rules and regulations as the council has provided, or shall hereafter prescribe.

SEC. 25. All goods or other property hereafter landed from any steamboat, canal boat, vessel or other water craft, or unloaded or deposited from any dray, cart or wagon, or other vehicle, upon the public landings, docks or wharves of the city at the foot of the streets, or elsewhere, shall be subject and liable to charges as follows:

On dry goods in boxes or bales, three cents per one hundred pounds; on groceries, hardware, drugs, medicines, crockery and glassware, two cents per one hundred pounds; on furniture, three cents per barrel bulk; on iron, steel, nails and spikes, one cent per one hundred pounds; on grindstones and pig iron, twelve and one-half cents per one thousand pounds; on staves and headings, thirty-seven and one-half cents per one thousand pieces; on wood, six and one-quarter cents per cord; on lumber, twelve and one-half cents per one thousand feet; on lime or sandstone, twenty-five cents per cord; on plaster, twelve and one-half cents per ton; on sand or brick, twelve and one-half cents per wagon load; on pork, beef, and fish, three cents per barrel; on salt, two cents per barrel; and on all other articles not enumerated, rates or charges proportionate to the foregoing, for the first thirty-six hours and fifty per cent. on the aforesaid charges for every twenty-four hours thereafter. No person shall remove any property landed or deposited without permission of the harbor master, without paying the aforesaid dock charges. No vessel shall be permitted to lie at any of the public landings, docks or wharves of the city for a longer period than three (3) hours, unless by permission of the harbor master; and at the option of the harbor master the payment of one dollar per hour after the period heretofore mentioned may be exacted from the owner or person in charge of such vessel.

SEC. 26. Every person depositing property on the docks and wharves of the city shall pay the dock charges on demand to the harbor master, and in depositing or removing property shall obey his orders both as to manner and time; and it is hereby made the duty of the harbor master to collect such charges and pay the same into the city treasury, and also to make complaint of any violations of this chapter to the police court.

SEC. 27. Any person or persons violating any provision of either of the last three sections of this ordinance shall, on conviction thereof, be fined in any sum not less than ten dollars nor more than fifty dollars.

SEC. 28. The committee on harbors and wharves shall annually, on or before the fourth Monday in March of each year, advertise for two weeks in two daily papers of the city for bids of cash to be paid in advance, for the right to collect wharfage upon any or all of the public landings of the city, fixing a day when such bids shall be examined and awards made by the aforesaid committee, which awards shall be reported to the city council, without unnecessary delay for approval. It shall be the duty of the city clerk, upon the approval of such awards by the council, and upon payment to the city clerk of the amount bid, to issue to any person or firm, to whom award has been made, a license to collect wharfage upon such public landing or landings as may have been awarded to such persons or firm, said license to expire on the first Monday in April next following. Any person so licensed shall give a bond with sufficient security, to keep such landings in as good repair as when he took control of them, the natural wear and decay of the landings excepted.

SEC. 29. That sections 392, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406 407, 408, 409, 410, 411, 412, 413, 414, 415, 416 417, 418, 419, 420, and 421 of the revised ordinances be and the same are hereby repealed.

SEC. 30. That this ordinance shall be in force from and after its passage and legal publication.

Passed by the common council November 18, 1887. W. M. BAYNE,
President of the Board of Councilmen.
JAMES LAWRENCE,
President of the Board of Aldermen.
Approved November 19, 1887.
B. B. BABCOCK, Mayor.
CHARLES P. SALEN, City Clerk.

Captain John Donnelly left for Oswego on last week, with steam pumps to lighter the schr. Julia. He expects to have the craft released soon.

Lottie Mason left Charlevoix for Beaver Island with material to rebuild schooner Milwaukee Belle, ashore there.

VESSEL OWNERS AND AGENTS.

H. J. WEBB & CO.,
Ship Brokers, Vessel Owners and Agents.
[ESTABLISHED IN 1856.]
H. J. WEBB & Co., will charter Vessels for Lake Trade pecial attention given to Chartering Vessels in the ake Superior Iron Ore Trade, both for the season and ngle trip.
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TELEPHONE { Office, No. 338. Residence, No. 1328.

WARNER & BECKER,
Vessel Agents and Brokers,
ROOM 10,
Arcade B'ld., 101 St. Clair St,
CLEVELAND, OHIO.

J. J. H. BROWN. EDWARD SMITH
BROWN & CO.,
Ship Brokers and Agents.
Special Attention given to Surveying, Appraising and Settling Marine Losses.
Exchange Building, 202 Main-st., Buffalo, N. Y.

ALEX McDOUGALL,
VESSEL AGENT AND BROKER,
Duluth.
Owners and masters of vessels wishing to get cargoes of grain from this port will do well to confer with me. Will be glad to furnish information in regard to cargoes, also in relation to docks, depth of water, etc., at **Duluth, Agate Bay** (new iron ore port), **Port Arthur, Washburn, Ashland,** and all points near the west end of Lake Superior. Good gangs of men furnished on short notice for trimming cargoes of grain, loading and unloading all kinds of freight.

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Vessel Owners & Agents,
New Bank Building, corner of Superior and Bank Street, Cleveland, Ohio.

MOORE, BARTOW AND GILCHRIST,
Ship Brokers and Agents,
No. 101 St. Clair Street, Room 15.
CLEVELAND, - OHIO.

JAMES T. ROSE,
Vessel Agent and Broker,
Room 4, Exchange Building, Duluth, Minn.
I have an excellent gang of Trimmers this season, Captain Miller's old Crew.
Special Attention Paid to Chartering Vessels, and seeing that they get dispatch in Port.
CORRESPONDENCE SOLICITED.

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MANAGING OWNER
Wilson's Transit Line.
Gen. Forwarder. Freight and Vessel Agent.
CLEVELAND, O.

JOHN P. DEVNEY,
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Admiralty and Insurance Law Office,
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WM. H. DeWITT,
Attorney and Proctor in Admiralty.
ROOM No. 6, BLACKSTONE BLOCK.
CLEVELAND, OHIO.

GEORGE E. HALLADAY.
Attorney and Proctor in Admiralty.
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C. A. KING,
General Stevedoring. Discharging Loading and Ore Trimming Promptly Attended to. A Large Force of Men always on Hand. Information in regard to
DEPTH OF WATER OF ALL DOCKS IN
ASHLAND HARBOR
gladly furnished. Quick dispatch guaranteed. Patronage Solicited.
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Reports of Passing Vessels a Specialty.
Messages Delivered to Passing Vessels Day or Night, Weather Permitting.
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SEVENTEEN YEARS EXPERIENCE
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F. J. STIMPSON, MACKINAW CITY MICH.

H. D. COFFINBERRY, PRES'T. ROBERT WALLACE, VICE PRES'T. WM. M. FITCH SEC'Y.

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IRON SHIPS,

Marine and Stationary

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Blowing Engines and Steam Hammers,

AND MILL GEARING AND CASTINGS.

We take pleasure in announcing that we have purchased the property, business and good-will of the Cuyahoga Steam Furnace Company, and will add to these works, so long and favorably known, a first-class Iron Ship-building Department, with sufficient room and all modern facilities for building two large vessels at the same time, and a Boiler Shop with most approved tools for large work, including Tweddell's Hydraulic Plant for flanging, riveting, etc.

We have associated with us Messrs. H. D. Coffinberry and Robert Wallace, late of the Globe Ship-building Co., and the Globe Iron Works, and Wm. M. Fitch, late of the Winslow Line of Steamers. We have made the following appointments: Mr. O. N. Steele, Assistant Superintendent; Mr. Thomas W. Bristow, late foreman of Wyandotte Ship Yard, Superintendent of Ship Yard; Mr. Quincy Miller, Superintendent of Boiler Shop; Mr. John Stoney, Superintendent of Foundry, and Mr. Jas. C. Wallace, Draughtsman.

We purpose building Iron and Steel Vessels of all descriptions, Marine and Stationary Engines and Boilers, Blowing Engines, Steam Helve Hammers and such other work as our large assortment of patterns eminently qualify us to build, at a minimum price.

Your patronage is solicited, and we trust that the excellence of our work, with fair dealing and strict attention to business, will secure its continuance.

THE CLEVELAND SHIP-BUILDING COMPANY.

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CENTRIFUGAL PUMPING MACHINERY.

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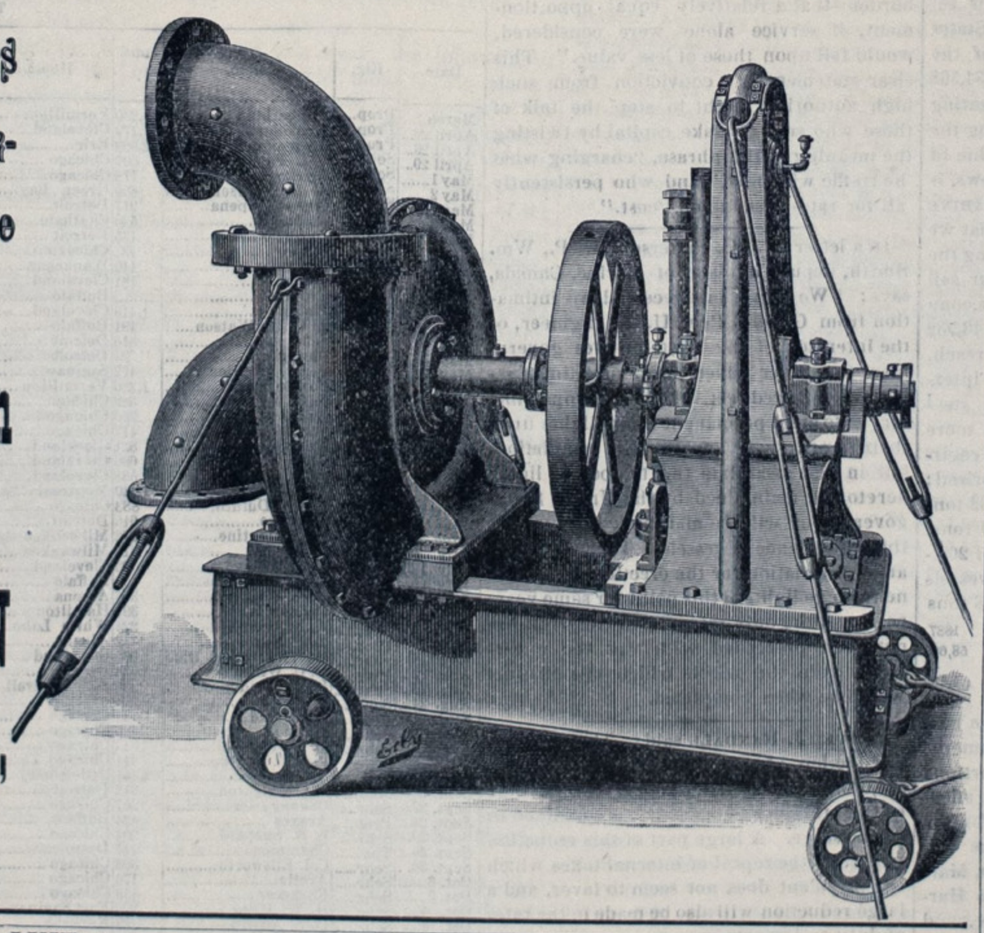

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Corrected for Additions and Changes to the Opening of Navigation in 1887,)
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This mine is on the shores of Lake Huron, close to a good harbor. First-class ore, assayed 70 per cent pure iron. This ore is said by experts to be much better than Lake Superior iron ore, and the only ore of its kind so far discovered on this continent capable of making Bessemer steel. Will sell outright, on shares or a royalty. Specimens of ore furnished and inspection of mine solicited.
Also, two silver mines on Lake Superior, close to a good harbor. Specimens furnished. Apply to
MARINE RECORD, Cleveland, Ohio.

Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building] Cleveland, O.

A. A. POMEROY, EDITOR AND PROP.

BRANCH OFFICE:

256 South Water Street, Chicago, Illinois,

THOMAS WILLIAMS, Associate Editor.

TERMS OF SUBSCRIPTION:

One year, postage paid.....$2.00

Six months, postage paid..... 1.00

Invariably in advance.

THE MARINE RECORD can be found for sale by the following news dealers:

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SARNIA, ONT.—D. McMasters.

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KINGSTON, ONT.—F. Nisbet, corner Brook and Wellington Streets.

Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, O., THURSDAY, DEC. 15.

OUR LAKE COMMERCE.

This week the table of losses is presented to our readers. While the tables of former years have been more perfect in details, this one enumerates all the losses of importance that have occurred during the year. In taking into consideration that there are 12,840 vessels entered at the different custom houses in the United States we show the enormous magnitude of our water commerce, and when the statement is made that 3,000 of those vessels navigate the lakes, the importance of the lake commerce is set forth. The tonnage of the United States vessels, according to the last report of the commissioner of navigation, is 2,284,568 tons. The total number of vessels navigating the lakes is upwards of 3,000, including the United States and Canada. The value of our lake commerce, as every one knows, is large. The table, presented in the MARINE RECORD some weeks since, showed that we built on the lakes for competition during the season of 1887, 43 steamboats, and four sail vessels of wood, five of steel, and one composite, with an aggregate tonnage of 43,732 tons. The cost of these boats will reach, in round numbers, $6,000,000. It is interesting to note that the cost of the steel steamers is only about $10 per ton more than that of the wooden boats. The registered tonnage, June 30, 1887, comprised: American steamers, 1,174, of 372,732 tonnage, of which 38 steamers, of 40,460 tons, are of iron or steel, and 1,105 sailers of 262,657 tons tonnage, or 2,279 American vessels of an aggregate tonnage of 6,635,618 tons

	1884.	1885.	1886.	1887.
Sail, tons	7,380	3,669	4,896	58,693
Number	25	24	11	48
Steam, tons	15,835	15,524	10,779	5,139
Steam, number	25	24	14	5

At a future date we will reprint the new tonnage launched this year. The commerce of the lakes has assumed grand proportions and the vessels we are now putting afloat exceed those built in this country for the ordinary traffic on the ocean. There is a large trade from the iron ore districts, Marquette, Escanaba, Ashland, and Two Harbors, and grain from Duluth, Chicago, and many of the smaller ports foot up well. Besides this the lumber producing regions swell the lake traffic beyond the conjecture of eastern people.

The necessity of improved facilities at the Sault is well known and needs no comment here. The traffic tabulated is as follows:

	St. Mary's Falls Canal		Suez Canal	
	No. vessels.	Tonnage.	No. vessels.	Tonnage.
1882	4,774	7,463,088	3,198	5,074,809
1883	4,315	2,042,259	3 307	5,775,862
1884	5,698	2,997,834	3,284	5,771,521
1885	5,380	3,035,937	3,625	6,335,752
1886	7,424	4,219,327	3,100	3,767,656
1887	.....	5,600,000	.....	.....

This season the business of the lock has been greatly augmented, the statement being as follows:

Year.	Steamers.	Sail vessels.	Unregistered.
1886	4,584	2,534	306
1887	5,968	2,562	825
Increase	1,384	28	519

	Total Passages.	Total Dockages.	Tonnage. Reg'd.	Freight.	Passengers
1886	7,424	3,593	4,219,397	4,527,759	27,080
1887	9,355	4,165	4,897,598	5,494,649	32,660
Increase	1,931	572	678,201	966,890	5,580

It is proposed to build a new and enlarged lock at an estimated cost of $4,738,865, and for the improvement of the Hay Lake channel to give a draft for vessels of twenty feet, $2,659,115, or $7,397,980 total cost. The St. Mary Falls canal was constructed by the state of Michigan, but has since been turned over to the United States government in consideration of its remaining toll-free forever. The iron ore trade gives a traffic of several million tons annually, the copper product of something near 20,000 tons annually, and what the wheat trade will be as the country along the railroads shall become settled and its fertile lands brought under cultivation by an enterprising population time only can determine. The possibilities for the increase of commerce through Lake Superior are vast, and, as yet, hardly imagined. It is proposed to construct a canal from Duluth to a point on the Red River of the North, which is navigable to where it empties into Lake Winnipeg. The Saskatchewan river also empties into Lake Winnipeg, is large, and with some improvement by slack water, may extend steamboat navigation 1,600 miles westward from Lake Winnipeg. This river and its affluents traverse territory (good wheat lands) 500,000 square miles in extent, an area eight times as large as the state of Ohio. With those lands populated and cultivated commerce on Lake Superior can not but be of vast magnitude.

THE *Railway Review* says the inter state commissioners in their annual report give their opinion very plainly upon the principle or practice usually called "charging what the traffic will bear." They say: "It has been shown that to take each class of freight by itself and measure the reasonableness of charges by reference to the cost of transporting that particular class, though it might seem abstractly just, would neither be practicable for the carriers nor consistent with the public interest." They then urge that the best way to serve public interests is to so apportion rates as to encourage free exchange of products between different sections of the country and with foreign countries. This encouragement can only be given, they say, by "making value an important consideration and by placing upon the higher class of freight some share of the burden that a relatively equal apportionment, if service alone were considered, would fall upon those of less value." This clear statement of a conviction from such high authority, ought to stop the talk of those who seek to make capital by twisting the meaning of the phrase, "charging what he traffic will bear," and who persistently all for rates based upon "cost."

IN a letter to J. C. Patterson, M. P., Wm. Smith, deputy minister of marine, Canada, says: "We have just received an intimation from General Poe, U. S. engineer, of the intention of the United States government to further widen the Lime Kiln crossing one hundred feet. It will be impossible for us to erect permanent range lights until their work has approached completion, but in the meantime the temporary lights heretofore maintained by the United States government will be maintained by us for the convenience of vessels. There has been an appropriation for the erection of permanent range lights at this point for some years past, and the only reason that the work has not been proceeded with was the uncertainty as to the width which the channel would be when completed.

SAMUEL J. RANDALL said: "There will be a reduction of taxation at this session of $60,000,000 or more, but not on the exact line of the president's suggestion as contained in his message. A large part of this reduction will be in the repeal of internal taxes which the president does not seem to favor, and a large reduction will also be made in the rates of duty on imports.

TOTAL values of the exports of domestic breadstuffs for November 1887, $9,503,703; November 1886, $12,598,841; five months ending Nov. 30, 1887, $63,360,312; same period in 1886, $65,215,108; eleven months ending Nov. 30, 1887. $148,019,641; same period in 1886, $135,077,671,

A TABLE OF DISASTERS ON THE INLAND SEAS DURING THE SEASON OF 1887.

Seventy-Three Vessels and Their Cargoes Were Totally Destroyed, Representing a Financial Loss of Two and a Half Millions of Dollars—The Lost Tonnage Will be Replaced Fivefold by New Vessels Before the Next Season Opens—Marine Underwriters Have Suffered Severely, Partly Because They Have Been Reckless in Accepting Risks.

During the season of lake navigation, now at an end, 204 lives have been lost on the inland seas and not less than $2,500,000 worth of property has been destroyed. Seventy-three vessels, aggregating 20,687 registered tons, have ceased to exist, as compared with fifty-seven vessels and 17,070 tons in 1886. The total losses comprise sixteen steamers, forty-three schooners, six tow barges, and eight tugboats, representing a financial loss of $792,000 on hulls and $408,400 on cargoes. But despite this large total destruction of vessel property the tonnage that has passed out of existence is much less than one-half of the aggregate new tonnage that has been built at the lake shipyards this year and put in commission. Since the opening of navigation last spring forty-seven steamers, four tow barges, and two tugboats, aggregating 52,254 tons and costing $5,525,000, have been launched and completed, and there are now on the stocks, in various stages of construction, an almost equal amount of new tonnage. Consequently the 20,687 tons of floating property that has been blotted out by storms this year will, by next spring, be replaced by upward of 100,000 tons, and as most of the new tonnage is steam, while most of the old was sail, there will be a much larger gain in tonnage than the figures actually represent, for one ton propelled by steam is fully equal to three tons that depend entirely upon the action of the wind for propelling power. In the tables given below record is made of only the more important partial losses, and do not include hundreds of minor mishaps that involved losses ranging from $100 to upwards of $1,000. The loss columns in the partial-loss table foot up $396,600 on hulls and $238,700 on cargoes, making an aggregate loss in both tables of $1,835,000. If the minor mishaps were included the total would be close to $2,500,000, and that amount is probably an under, rather than an overestimate. The figures are about $500,000 in excess of the estimate placed on the losses of 1886, but not so high as the aggregate losses in 1883.

It is not pretended that the figures set down in the loss columns are accurate, but they have been compiled from the books of underwriters, with a fair allowance for the uninsured interests, and are as close an estimate as such a table possibly could be.

TABLE OF TOTAL LOSSES.

Date.	Rig.	Name.	Tons.	Home Port.	Owner.	When Built.	Class.	Cargo.	Where wrecked.	Nature.	Loss on cargo	Loss on hull.
April 29	Barge	L. O'Neil	522	Marine City	R. Holland	1862	A2	Coal	Lake Erie	Sunk	$7,000	$18,000
May 2	Prop.	G. P. Heath	117	Sheboygan	Eichmeyer	1872	B1½	Hay	Lake Michigan	Burned	600	6,000
June 1	Schr.	L. Van Valkenburg	286	Chicago	T. Hood	1862	B1	Coal	Lake Huron	Sunk	2,000	*5,000
June 11	Tug	James Reid	88	Port Huron	Runnels	1863	A2	Tow	Lake Michigan	Burned	.....	14,000
June 11	Prop.	Good Hit	69	Cleveland	G. B. Mills	1880	A2½	Lime	Lake Erie	Burned	1,500	6,000
June 15	Prop.	Champlain	356	Milwaukee	N. M. Line	1870	A2	Sund's	Lake Michigan	Burned	11,000	25,000
June 20	Prop.	P. H. Walker	.....	Lorain	.....	.....	OO	Stone	Lake Erie	Found'd	2,000	*3,000
July 12	Barge	Toboggan	.....	Milwaukee	.....	1886	.....	Lumber	Lake Michigan	Sunk	6,000	*15,000
July 23	Schr.	T. Perry	249	East Saginaw	Prentice	1855	B1	Coal	Lake Erie	Sunk	1,750	5,000
August 7	Prop.	L. N. Foster	304	Buffalo	Daushey	1872	A2	Ore	Lake Michigan	Ashore	4,000	8,000
August 7	Tug	Fawn	.....	.....	.....	.....	.....	Sund's	Lake Michigan	Found,d	1,500	*6,000
August 12	Schr.	Patrick Henry	18	Cleveland	Smith	1881	A2	Light	Lake Erie	Sunk	.....	8,000
August 23	Tug	Gesine	99	Chicago	.....	185	OO	Lumber	Lake Michigan	Collision	2,500	*2,000
August 28	Tug	Frank Geele	12	Muskegon	Barry Bros	1872	B1	Light	Lake Michigan	Burned	.....	3,000
August 30	Schr.	Jack Barry	25	Muskegon	Barry Bros	1862	A2½	Light	Lake Michigan	Burned	.....	5,000
Sept. 4	Barge	Blue Bell	122	Manitowoc	.....	1867	OO	Cedar	Lake Michigan	Collision	2,000	*1,500
Sept. 7	Barge	Anglo-Saxon	314	Detroit	A. A. T. Co	1864	OO	Cedar	Straits	Ashore	4,000	*6,000
Sept. 7	Schr	J. A. Smith	243	Detroit	A. A. T. Co	1871	B2	Cedar	Straits	Ashore	2,500	*3,000
Sept. 7	Schr.	Niagara	726	Cleveland	J. Corrigan	1873	A2	Ore	Lake Superior	Found'd	9,000	30,000
Sept. 13	Schr.	Provost	95	Detroit	Carron	1864	B2	Brick	Lake Huron	Ashore	1,000	1,800
Sept. 22	Schr.	F. D. Barker	290	Cleveland	Wilford	1867	A2	Light	Lake Michigan	Ashore	.....	8,000
Sept. 29	Schr.	Lalla Rookh	57	Manistee	Johnson	1881	B2	Slabs	Lake Michigan	Ashore	500	*1,000
Oct. 3	Schr.	Pulaski	332	Toledo	Hubbard	1873	A2	Coal	Lake Michigan	Ashore	3,500	9,000
Oct. 3	Prop.	California	586	Montreal	Crangle	1873	A2	Sund's	Lake Michigan	Found'd	20,000	27,000
Oct. 3	Tug	Hancock	39	St. Ignace	Chambers	1867	B1	Light	Lake Superior	Ashore	.....	*3,000
Oct. 3	Prop.	Albion	386	Gratham	Muir	1863	B1½	Lumber	Lake Huron	Ashore	7,500	7,600
Oct. 3	Schr	City of Green Bay	329	Chicago	Reed	1872	A2	Ore	Lake Michigan	Ashore	3,100	9,700
Oct. 3	Schr	Havana	305	Kenosha	Reed	1871	A2	Ore	Lake Michigan	Sunk	2,450	.....
Oct. 4	Schr	Jessie Scarth	408	Toronto	Cordin	1871	A2	Corn	Lake Michigan	Found'd	13,500	8,000
Oct. 4	Schr	Venus	221	Caseville	A. G Stone	1872	A2	Stone	Lake Huron	Found'd	4,000	7,000
Oct. 4	Schr	C. H. Hutchinson	297	Cleveland	Hutchinson	1866	B1½	Lumber	Lake Erie	Sunk	5,000	*7,000
Oct. 4	Tug	Orient	19	Marine City	Lyon	1874	A2	Light	Lake Erie	Found'd	.....	6,000
Oct. 8	Schr	L. Hanna	660	Cleveland	Hanna & Co	1872	A2	Ore	Lake Michigan	Ashore	7,000	35,000
Oct. 8	Tug	Pendell	14	Cheboygan	Kitchen	1879	A2½	Light	Lake Superior	Ashore	.....	*3,000
Oct. 13	Schr	Manzanilla	400	St. Catharines	Williams	1873	A2½	Coal	Lake Erie	Found'd	3,500	5,800
Oct. 15	Schr	Riverside	244	Toledo	Enright	1870	A2	Coal	Lake Michigan	Ashore	2,000	9,000
Oct. 20	Schr	Pride of America	350	St. Catharines	Ryan	1863	B1	Coal	Lake Ontario	Ashore	2,500	5,000
Oct. 20	Prop.	Lincoln	375	St. Catharines	J. Norris	1872	A2	Cedar	Georgian Bay	Ashore	5,000	15,000
Oct. 22	Schr	C. O. D.	274	Buffalo	Kelderhouse	1873	A2	Wheat	Lake Erie	Ashore	15,000	7,000
Oct. 23	Schr	George Sherman	307	Cleveland	Benham	1862	B1	Coal	Lake Superior	Ashore	3,000	6,500
Oct. 23	Schr	Maine	144	Chicago	Swanson	1852	B2	Cedar	Lake Michigan	Ashore	2,000	*1,500
Oct. 23	Schr	Oriental	375	Kingston	Calvin	1866	B2	Coal	Lake Ontario	Found'd	3,000	*3,500
Oct. 23	Schr	Polynesia	940	Cleveland	Corrigan	1885	A1	Coal	Lake Michigan	Found'd	8,000	50,000
Oct. 24	Schr	L. D. Bullock	241	Napanee	Eccles	1874	A2½	Wheat	Lake Ontario	Found'd	14,000	5,600
Oct. 24	Schr	Plymouth	740	Baker	N. Baltimore	1853	A2	Coal	Lake Superior	Ashore	5,500	22,000
Oct. 24	Schr	Norris	251	Saginaw	Mitchell	1855	B2	Lumber	Lake Huron	Ashore	4,500	*1,800
Oct. 24	Schr	Dolphin	139	East Saginaw	Jenessen	1855	OO	Lumber	Lake Huron	Sunk	2,000	*1,500
Oct. 24	Prop.	Laketon	147	Bay City	Mitchell	1868	A2	Sund's	Lake Superior	Ashore	3,500	7,000
Oct. 24	Schr	L Seaton	221	Rochester	Armstrong	1872	A2½	Wheat	Lake Erie	Sunk	9,000	5,000
Oct. 24	Schr	Sylvia Morton	179	Detroit	Murphy	1862	B2	Light	Lake Huron	Ashore	.....	*2,500
Oct. 24	Schr	J. F. Joy	554	Erie	O'Brien	1866	A2	Ore	Lake Erie	Sunk	6,000	17,500
Oct. 24	Prop.	City of Owen Sound	598	Owen Sound	Keighly	1875	A1½	Sund's	Lake Huron	Sunk	20,000	29,000
Oct. 28	Schr	Bessie Barwick	374	St. Catherines	Shickluna	1866	A2½	Wheat	Lake Superior	Ashore	16,000	6,000
Oct. 29	Prop.	Vernon	560	Chicago	A. Booth	1886	A1	Sund's	Lake Michigan	Found'd	7,000	65,000
Oct. 29	Schr	Acontias	251	Detroit	Hurley	1856	B1½	Lumber	Lake Huron	Ashore	4,000	*4,000
Oct. 29	Schr	A. H. Moss	289	Detroit	Hurley	1863	B1	Lumber	Lake Huron	Ashore	4,000	4,500
Oct. 30	Schr	Napoleon	108	Milwaukee	Hanson	1854	OO	Slabs	Lake Michigan	Ashore	500	*1,500
Nov. 3	Schr	William Moore	.....	Marquette	.....	.....	.....	Light	Lake Superior	Ashore	.....	*3,000
Nov. 7	Prop.	Osceola	787	Detroit	Ward	1882	A1	Flour	Lake Huron	Ashore	50,000	75,000
Nov. 10	Schr	Consuelo	135	Detroit	Chamberlain	1851	O	Lumber	Lake Huron	Ashore	2,500	*1,500
Nov. 10	Schr	Myosotis	317	Kenosha	Reed	1874	A2½	Ore	Lake Michigan	Ashore	2,600	8,000
Nov. 11	Schr	Blazing Star	265	Chicago	Comerford	1873	A2	Lumber	Lake Michigan	Ashore	5,000	8,000
Nov. 14	Barge	Hinckley	309	Aipena	Gilchrist	1862	B1	Lumber	Lake Erie	Ashore	4,500	5,000
Nov. 14	Barge	Harmon	271	Alpena	Gilchrist	1867	A2½	Lumber	Lake Erie	Ashore	4,500	7,000
Nov. 16	Prop.	Pacific	604	Michigan City	Cook & Wilson	1864	A2	Lumber	Lake Superior	Ashore	9,000	22,000
Nov. 17	Prop.	Arizona	810	Erie	Anchor Line	1868	A2	Sund's	Lake Superior	Burned	50,000	40,000
Nov. 20	Schr	R. Morwood	268	St. Catherines	Morwood	1856	A2½	Oil	Lake Superior	Ashore	4,000	6,000
Nov. 21	Schr	Alice Craig	41	Bayfield	Boutin	1877	B1	Suppl's	Lake Superior	Ashore	2,000	2,500
Nov. 23	Tug	W. S. Carkin	15	East Saginaw	Cramm	1875	A2½	Light	Lake Huron	Ashore	.....	4,000
Nov. 24	Prop.	S. H. Johnson	100	Chicago	Mears	1875	B1	Lumber	Lake Michigan	Ashore	3,000	6,000
Nov. 24	Schr	White Star	331	Oswego	Cummings	1874	A2	Coal	Lake Erie	Ashore	3,000	9,000
Nov. 25	Schr	Delaware	165	Belleville	Downey	1872	A2½	Light	Lake Ontario	Ashore	.....	4,500
Dec. 5	Prop.	C. H. Merritt	120	Chatham	Merritt	1883	A2	Light	Chatham	Burned	.....	18,000

*Not insured.

TABLE OF PARTIAL LOSSES.

Date.	Rig.	Name.	Tons.	Home Port.	Owner.	When built.	Class.	Cargo.	Where wrecked.	Nature.	Loss on cargo.	Loss on hull.
March	Prop.	Cumberland	1,280	Vermillion	Gilchrist	1881	A1	Wheat	Detroit	Sunk	$60,000	$2,000
April 26	Prop.	Wocoken	1,179	Cleveland	Winslow	1880	A1½	Coal	Straits	Ice	.....	2,000
April 29	Prop.	Susquehanna	2,069	Erie	Anchor Line	1886	A1	Coal	Straits	Ice	.....	3,500
April 29	Schr.	T. L. Parker	597	Chicago	Elphicke	1881	A1	Coal	Lake Erie	Collision	.....	3,000
May 1	Schr.	Carrier	178	Chicago	Gunderson	1865	A2½	Light	Lake Michigan	Collision	.....	1,200
May 2	Schr.	A. M. Peterson	600	Green Bay	Hurlbut	1874	A2	Ore	Lake Michigan	Dism's'd	.....	2,500
May 2	Stmr.	City of Alpena	917	Detroit	D. & C. S. N. Co	1869	A1	Sundr's.	Lake Huron	Collision	.....	1,500
May 2	Prop.	Tecumseh	530	Chatham	McArthur	1873	B1	Lumber	Lake Huron	Collision	.....	2,500
May 3	Schr.	Consuelo	135	Detroit	Chamberlain	1851	B2	Platers	Lake Michigan	Ashore	700	*2,000
May 4	Schr.	Homer	43	Chicago	Halsted	1866	A2	Corn	Georgian Bay	Ashore	13,000	3,000
May 9	Prop.	Bessemer	440	Waukegan	L. M. & L. S. T. Co	1875	A2	Ore	Lake Superior	Ice	700	1,500
May 9	Tug	Samson	181	Cleveland	Benham	1864	A2	Light	Lake Erie	Collision	.....	1,500
May 15	Prop.	Nevada	.....	Buffalo	Kelderhouse	1882	A2	Ore	Lake Michigan	Collision	.....	2,500
May 22	Prop.	Wallula	1,416	Cleveland	Wilson	1882	A1	Ore	Lake Superior	Ashore	2,500	5 000
May 29	Schr.	S. V. R. Watson	491	Buffalo	Cramer	1862	A2	Coal	Lake Huron	Sunk	.....	18,000
May 29	Schr.	Senator	316	Detroit	Candler	1863	A2	Coal	Lake Huron	Sunk	.....	15,000
May 30	Tug	Oswego	94	Detroit	Grummond	1857	B1	Light	Lake Erie	Sunk	.....	3,000
May 31	Prop.	J. H. Prentice	472	Saginaw	Sanborn	1885	A1	Ore	Lake Huron	Ashore	.....	2,500
June 2	Prop.	Cumberland	1,280	Vermillion	Gilchrist	1881	A1	Coal	Lake Superior	Ashore	.....	1,500
June 7	Schr.	J. H. Mead	389	Chicago	Ripley	1874	A2	Cedar	Lake Huron	Collision	.....	1,800
June 8	Schr.	Naiad	296	Chicago	Sheriff	1863	A2	Light	Lake Michigan	Collision	.....	2,000
June 9	Schr.	Sunrise	417	Chicago	Hibernian Bank	1862	A2	Coal	Lake Michigan	Ashore	.....	12,000
June 11	Prop.	Vienna	821	Cleveland	C. T. Co	1873	A2	Ore	Straits	Ashore	1,800	2,500
June 13	Schr.	Kate Winslow	699	Cleveland	Wright	1872	A2½	Coal	Sault	Sunk	.....	2,500
June 14	Schr.	John O'Neill	585	Cleveland	Johnston	1873	A2	Coal	Lake Huron	Ashore	.....	2,000
June 16	Prop.	Athabasca	1,440	Montreal	C. P. Ry.	1883	A1	Sund's.	Georgian Bay	Ashore	5,000	8,000
June 16	Prop.	City of Duluth,	883	Chicago	Spencer	1874	A1½	Sund's.	Lake Michigan	Ashore	3,500	6,000
June 22	Schr.	Marengo	616	Detroit	Chesebrough	1873	A2	Coal	Straits	Ashore	.....	2,000
June 28	Prop.	D. Ballentine	972	Milwaukee	Fitzgerald	1873	A2	Coal	Rivers	Strand	.....	1,500
July 4	Prop.	Progress	1,310	Milwaukee	M. T. Co	1880	A1½	Ore	Lake Michigan	Ashore	.....	3,000
July 11	Schr.	Joseph Paige	595	Cleveland	Axworthy	1872	A2	Coal	Sault	Collision	.....	4,500
July 12	Schr.	Thomas Parsons	332	Buffalo	Mullins	1868	B1	Ore	Lake Michigan	Ashore	.....	1,800
July 23	Prop.	Fred McBrier	355	Alpena	Miner L. Co	1881	A1	Wheat	Lake Erie	Leak	2,500	1,000
Aug. 3	Prop.	Canada	390	Hamilton	Fairgreaves	1872	A2	Sund's.	Lake Superior	Ashore	.....	2,000
Aug. 4	Prop.	A. D. Hayward	224	White Lake	Campbell	1887	A1	Lumber	Chicago	Fire	.....	7,500
Aug. 8	Prop.	S. C. Hall	342	Alpena	Gilchrist	1880	A1½	Light	Lake Michigan	Ashore	.....	1,500
Aug. 18	Schr.	Red, White and Blue	425	Cleveland	Richardson	1863	A2	Coal	Lake Michigan	Leak	.....	1,500
Aug. 22	Prop.	D. C. Whitney	1,013	Detroit	Whitney	1882	A1	Ore	Lake Huron	Ashore	.....	12,000
Aug. 23	Schr.	Lady Mcadonald	333	Port Burwell	Hargrave	1873	B1	Wheat	Lake Michigan	Leak	3,000	1,000
Aug. 24	Schr.	C. Marshall	208	Chicago	Marshall	1881	A2	Cedar	Straits	Ashore	.....	1,500
Sept. 1	Prop.	Jay Gould	837	Chicago	Leopold & A	1869	A2	Sund's.	Straits	Ashore	.....	2,000
Sept. 7	Schr.	Mary D. Ayer	321	Chicago	Ayer	1854	A2	Cedar	Lake Huron	Ashore	.....	5,300
Sept. 7	Schr.	E. B. Maxwell	343	Chicago	Mullin	1881	A1	Corn	Lake Huron	D'sm'std	3,000	9,000
Sept. 15	Schr.	City of Chicago	311	Chicago	Higgie	1861	A2	Cedar	Straits	Ashore	.....	3,500
Sept. 15	Prop.	W. A. Haskell	1,441	Ogdensburg	V. C. Ry. Co	1884	A1	Sund's.	Lake Erie	Ashore	.....	3,000
Sept. 20	Schr.	F. C. Leighton	312	Detroit	Parker	1875	A2	Ore	Lake Michigan	Ashore	.....	2,500
Sept. 22	Schr.	Orkney Lass	267	Chicago	Nelson	1856	OO	Cedar	Straits	D'sm'std	.....	*2,500
Sept. 24	Prop.	Araxes	424	Buffalo	Brown	1856	B1	Lumber	Lake Huron	Ashore	1,000	4,000
Sept. 25	Schr.	L. B. Shepard	204	Chicago	Glover	1855	B1½	Lumber	Lake Michigan	Ashore	.....	*2,000
Sept. 26	Tug	Champion	147	Detroit	Grummond	1868	.....	Light	Lake Erie	Disabled	.....	*3,000
Sept. 30	Schr.	Col. Ellsworth	303	Chicago	O'Connell	1861	B1	Cedar	Lake Huron	Ashore	.....	2,500
Oct. 3	Schr.	Arctic	176	Chicago	Page	1853	B1½	Light	Lake Michigan	Ashore	.....	*1,500
Oct. 3	Schr.	Ebenezer	159	Chicago	Michelson	1846	B1½	Lumber	Lake Michigan	Ashore	.....	*2,000
Oct. 4	Schr.	H. W. Hoag	270	East Saginaw	Sanborn	1862	B2	Lumber	Lake Erie	Dism'l'd	1,000	*2,500
Oct. 4	Schr.	D. S. Austin	268	Kenosha	Read	1872	A2	Stone	Lake Huron	Ashore	.....	10,500
Oct. 4	Schr.	J. G. Kolfage	109	Amherstburg	McEwen	1869	B1	Lumber	Lake Huron	Ashore	.....	3,000
Oct. 4	Schr.	Newsboy	393	Chicago	Trumbull	1862	A2½	Coal	Lake Erie	Dism's'd	.....	2,500
Oct. 15	Prop.	Pacific	604	Michigan City	Cook & Wilson	1864	A2	Lumber	Lake Superior	Disabled	.....	6,000
Oct. 15	Prop.	Clyde	1,158	Buffalo	L. V. Co	1881	A1	Corn	Lake Michigan	Leak	2,500	3,500
Oct. 21	Prop.	R. Martini	278	Saginaw	L. F. Hunt	1876	B1	Lumber	Lake Huron	Ashore	.....	3,000
Oct. 22	Prop.	Cambria	1,377	Cleveland	Mutual T. Co	1887	A1	Ore	Limekilns	Disabled	.....	3,500
Oct. 22	Prop.	W. M. Egan	1,380	Milwaukee	F. E. & A	1887	A1	Coal	Rivers	Strand'd	.....	2,000
Oct. 23	Schr.	Alva Bradley	617	Cleveland	Bradley	1870	A2	Coal	Lake Superior	Ashore	.....	12,000
Oct. 24	Barge	Ark	578	St. Catharines	Muir	1875	B1½	Lumber	Lake Erie	Ashore	.....	*4,500
Oct. 24	Schr.	Reed Case	314	Chicago	Magill	1869	A2	Coal	Lake Michigan	Collision	.....	2,000
Oct. 24	Schr.	Victor	313	Detroit	Murphy	1867	B1½	Lumber	Georgian Bay	Ashore	.....	*1,500
Oct. 24	Prop.	Delaware	1,526	Erie	Anchor Line	1878	A1½	Sund's.	Lake Huron	Ashore	25,000	10,000
					Warner	1867	B1	Coal	Lake Erie	Ashore	3,200	10,500

Oct 24	Schr	Zach Chandler	690	Milwaukee	Pauly	187	A1	Lumber	Lake Michigan	Collision	3,000
Oct. 24	Prop.	Westover	416	Milwaukee		1873	A2½	Light	Lake Michigan	Ashore	9,200
Oct. 25	Schr	Pewaukee	295	Chicago	Felthas	1867	A2½	Ry°	Lake Erie	Ashore	1,300 2,000
Oct. 28	Schr	J. Kelderhouse	476	Racine	Jones & S	1876	A2	Corn	Lake Huron	Leak	4,500 1,000
Oct. 29	Schr	Lottie Cooper	240	Chicago	Ayer	1854	A2	Cedar	Lake Huron	Ashore	2,000
Oct. 29	Schr	Mary D. Ayer	321	East Saginaw	Burl	1882	A1	Lumber	Lake Huron	Ashore	2,000 18,000
Oct. 29	Schr	Nellie Mason	527	Ogdensburg	Hall & Co	1882	A1	Lumber	Lake Huron	Ashore	2,500
Oct. 29	Schr	W. A. Sherman	494	Detroit	Oades	1873	A2	Corn	Lake Huron	Ashore	14,000 4,500
Oct. 29	Schr	Mineral State	280	Chicago	Marshall	1881	A2	Cedar	Lake Michigan	Dism's'd	1,500
Oct. 30	Schr	C. Marshall	208	East Saginaw	Mason	1881	A2	Ore	Sault	Collision	2,500
Nov. 4	Schr	Rosa Sonsmith	738	Chicago	Mullin	1857	A	Oats	Lake Michigan	Ashore	9,000 2,500
Nov. 6	Schr	Commerce	311	Marine City	R. Holland	1883	A1	Wheat	Lake Michigan	Sunk	18,000 5,000
Nov. 7	Prop	J. W. Westcott	451	Cleveland	Winslow	1873	A2	Ore	Lake Erie	Sunk	5,000
Nov. 9	Prop	Egyptian	1,206	Milwaukee	Cochrane	1869	A2	Light	Lake Michigan	Collis'n	1,200
Nov. 10	Prop	Colin Campbell	280	Chicago	Leopold & A	1899	A2	Sund's	Lake Michigan	Ashore	6,000 4,000
Nov. 11	Prop	Jay Gould	837	Detroit	Grummond	1863	A2	Ore	Lake Huron	Ashore	6,000
Nov. 13	Schr	A. Boody	273	Chicago	Godman	1872	A2	Wheat	Lake Erie	Ashore	2,500 2,000
Nov. 14	Prop	D. J. Foley	348	Alpena	Gilchrist	1873	O2 ½	Coal	Lake Huron	Ashore	*1,800
Nov. 15	Prop	Garden City	276	Green Bay	McCormack	1880	A2	Sund's	Green Bay	Fire	1,500 8,000
Nov. 18	Stmr	City of Green Bay	172	Silver Lake	Wagar	1880	A1½	Light	Lake Michigan	Ashore	2,500
Nov. 19	Prop	Daisy Day	125	Montreal	M. T. Co	1882	A2½	W'h'at	Lake Ontario	Leak	3,000 1,000
Nov. 19	Schr	Glenora	739	Sheboygan	Gibbs	1862	A1	Light	Lake Michigan	Ashore	*2,000
Nov. 20	Schr	Stampede	280	Buffalo	Donaldson	1872	A2	Wheat	Sault	Ashore	1,500 2,500
Nov. 20	Prop	Cuba	1,380	Cleveland	Kerr	1861	A2	Lumber	Lake Huron	Ashore	2,000
Nov. 21	Schr	Constitution	402	Vermillion	Gilchrist	1874	A1	Sund's	Lake Michigan	Ashore	50,000 10,000
Nov. 21	Prop	Waverly	990	Chicago		1868	B1	Lumber	Lake Michigan	Collis'n	*2,500
Nov. 24	Schr	Phenix	206	Buffalo	W. T. Co	1884	A2½	Sund's	Straits	Ashore	60,000 15,000
Nov. 24	Prop	Albany	1,677	Oswego	McCarthy	1869	A2½	Coal	Lake Erie	Ashore	2,000
Nov. 24	Schr	D. G. Frost	323	Detroit	Merrick	1853	A2	Iron	Straits	Ashore	2,000
Nov. 25	Schr	Montgomery	284	Detroit	Maitland	1863	A1	Wheat	Lake Ontario	Ashore	3,000 1,500
Nov. 25	Schr	M. F. Merrick	281	Marine City	R. Holland	1838	A	Light	Chicago	Fire	1,000
Nov. 26	Prop	J. W. Wescott	451	Clevelanp							

*No tinsured.

LAKE CARRIERS' ASSOCIATION,

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARCTER OF THE SERVICE RENDERED TO THE PUBLIC, TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS, AND PROMOTE THEIR GENERAL WELFARE.

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MARINE RECORD—OFFICIAL PAPER.

LIBEL LAWS.

The national board of steam navigation, New York, has had prepared two drafts of bills designed to improve the present laws respecting the libeling of vessels, and has sent them to the Lake Carriers' Association for comment and criticism as regards their applicability to the requirements of our lake service. The first allows vessel owners to keep on file with the United States marshal a general bond, in the penalty of such sum as the owner may deem sufficient, and provides that no vessel specified in the bond shall be liable to seizure for a sum less than the amount covered, but that the marshal shall make his return of the service of the process by delivering the same to the person in charge of the vessel proceeded against. The claim being secured by the general bond as given. That within ten days thereafter a special bond, in the form now customary, shall be furnished by the owners.

The second bill suggested, applies to vessels the theory of the mechanics' lien law. It provides that upon writ or process from any competent court notice of lien may be filed at the custom house, with the collector of the district, and if within ten days a copy of the notice of lien shall have been served upon the person in charge of the vessel, and a copy also at the custom house where the vessel is registered, such liens shall, in order of filing, attach upon the vessel, and may be enforced against her unless a bond be promptly executed by or in behalf of the owners in manner provided. Both bills are intended to prevent the troubles experienced at present by reason of sudden seizure of a vessel at an inconvenient time.

The Lake Carriers' Association desires to obtain some striking illustrations of the annoyance and injustice caused by the present method, and will be much obliged for any detailed statements of actual occurrences. They should be sent at once to the secretary of the association at Buffalo.

MACHINISTS AND ENGINEERS.

To the Editor of the Marine Record:

DETROIT, December 12.

Your article, taken from the New York *Star*, signed "Justice," criticising the rules of the inspectors of steamboats, was written by the local inspectors of New York, the secretary of the treasury having authorized inquiry to be made as to why they violated the rules of the inspection service; and the prominent marine engineer with whom he conversed, as finding fault with the rule of the owners of machine shops who wished to have their workmen licensed under the old rule that was amended. There is no fee now charged for a license. It was found that the local inspectors, to oblige the owners of machine shops, granted licenses to those of their workmen whom they recommended. Under the old rule, a man who worked in a machine shop, was eligible to receive a license as engineer. This was brought to the attention of the national convention of marine engineers at their last meeting in New York, and proof of the abuse was furnished, where a license was granted to a man who had served his time in one of the largest marine shops in New York, and this man's experience in taking care of a marine engine consisted in running the bolt cutter, for he had done nothing else in the shop where he worked for three years, and his recommendation for a license was signed by the owner of the shop.

The word machinist covers a large number of workmen, for a man who works in a sewing machine shop claims he is a machinist, and he would be eligible to a license under the old rule. It is a wrong idea that a man who serves his time in, say, the best steam engine shop, is qualified to take charge of a steam engine. In most of the machine shops of the present time an apprentice is given some special tool to run, and he is kept at that until he is out of his apprenticeship, and when he goes to another shop and applies for work he is first asked what he can do. He will answer he is a lathe hand, or if he has served his time on a planer he will name that or some of the tools he has worked upon. This is the class of men who are now employed in the machine shops, and your correspondent was told by the foreman of the Delamater Iron Works, of New York, that all of their men were employed on some special machine, and that is the reason they are able to build machines now for $25 to $30 that once cost hundreds of dollars. This foreman also said that if he changed a man from one machine to another he would have to learn how to run the machine, and that was the reason they never changed.

The National marine engineers' association sent a committee to Washington to ask the board of supervising inspectors to change the rules, and that the word machinist should imply that a man had served his time in a marine engine shop and had worked on a steamboat one year before applying for a license. This, I think, is nothing but just to the owners of steamboats, for they should know that the engineer who applies to take charge of the engine of their boats, and presents his license, should be qualified, for if not he has it in his power to destroy the owner's property. The aim of the National association of marine engineers is to raise the standard of the marine engineer.

The writer has served five years as an apprentice in one of the largest marine engine shops there was at that time in the United States and worked as a journeyman and foreman for ten years and as an engineer for over thirty years. ENGINEER.

A West Side lake captain, known for his patience, became much excited because his wife bought a clothing store shirt for him which was too short, too narrow in the body, tight in the sleeves, buttons came off as soon as he touched them, etc. He wanted her to patronize the Boston Dry Goods Store of *Kohn & Co.*, 213 Detroit st., near corner Pearl, because they manufacture ☞ *genuine, home-made Shirts, Flannel,* fancy *Cassimere, Waterproof,* navy-blue, double and single-breasted, *Flannel Shirts,* 52 inches wide, 40 inches long, extra strongly sewed, or ☞ *make them to order* to the taste of the customer. If you select your own material we make them for 25c. each.

In connection we have ☞ a *merchant tailoring department,* conducted by our son, Jos. L. Kohn, a thoroughly-trained tailor and cutter, who offers to make first-class *Dress Suits, Business Suits, Overcoats* in the nobbiest style, from $8 to $10 less than any other merchant tailor, because he pays no extra rent, does his own cutting and wants to gain a reputation. Payments at the convenience of the customers.

☞ Leave your measure for scarlet Flannel Undershirts and Drawers. ☜ Kohn & Co., 213 Detroit st., near corner of Pearl, where every West Side car passes.

CATARRH CURED.

A clergyman, after years of suffering from that loathsome disease, Catarrh, and vainly trying every known remedy, at last found a prescription which completely cured and saved him from death. Any sufferer from this dreadful disease sending a self addressed stamped envelope to Professor J. A. Lawrence, 212 East 9th St., New York, will receive the recipe free of charge.

[*Around the Lakes Continued from 1st Page.*]

DETROIT.

The survey on the Albany was held last Thursday, and resulted in placing her value in her present damaged condition, at $120,000. As the same boat could not be built for the sum of $150,000, her damage is estimated at about $30,000. She is damaged on her bottom all the way back for one hundred feet, and has two holes near her bow. About eight of her plates are dented in. It will take six weeks to repair her.

The steamer F. E. Spinner, formerly the Quebec, arrived in Detroit from Buffalo on Saturday last with a cargo of 1,000 tons of coal, and went into winter quarters. At 3:30 o'clock Wednesday afternoon the vessel caught fire from a stove in the forecastle and was damaged to the extent of $250.

James McMillan, of Detroit, has telegraphed Senator Stockbridge at Washington, that his new boat for navigating the straites would not be in time for the winter and he could not get a substitute, excepting a Canadian vessel. He asks the Senator to secure him a permit to use a Canadian bottom, from he department.

MARQUETTE.

The opening of the Calumet and Hecla mine where it caved in is now practically closed again. The main engine is probably totally destroyed. This will cause great delay when the mine is opened again, as the men will have to enter at the Calumet branch. It is fortunate that the large force of men succeeded in covering the cavity with timber, otherwise the entire mine might have been gutted.

A contract has been let by Chief Engineer J. A. Latchs, of the Duluth, South Shore & Atlantic railway, for the addition of 15,000 tons' capacity to the ore docks of that road here, and 10,000 tons' capacity to the dock at St. Ignace. Thomas H. Hamilton, of Toledo, has secured the contracts and will begin work immediately. The new docks are to be finished by the opening of navigation in the spring. This practically doubles the capacity of the Marquette ore docks.

AMHERSTBURG.

During the past week, the following of our mariners returned home for the winter: Captain C. C. Allen and J. F. Jones, of the steamship Sheffield; Captain D. Nicholson, Donald J. Duncanson and Alex. Callam, of the Spinner; Captain D. Girardin, of the R. J. Hackett; Captain J. T. Hutton, of the Blanchard; James McGuire of the Forest City; Captain Jos. Biron, of the Challenge; George Cooper, of the Jay Cooke; Roman Smith and Thomas Kirk, of the Chisholm; Frank Auffret, of the Australasia; Joseph Powell, Jr., of the W. Castle; William England, of the Mary Green; James Nall and Amos Jones, of the E. B. Hale; George Honor, of the Mary Pringle; Albert Meloche, of the Swain; T. Gilbo, of the Fayette Brown, and W. Norvell, of the Winslow; John Horsley, of the Rutter; George Horsley of the Swain.

Captain Andrew Steinhoff, of Chatham died last Sunday. The captain had been in decline for a long time, and his trouble had been pronounced incurable by the best physicians in England and America with whom he had consulted.

FRANKFORT.

Special to the Marine Record.

The barge Wm. Rudolph and schooner Annie O. Hanson are laid up in Milwaukee.

Tug Hannah Sullivan, Captain Mulhagen, has returned to her home port, St. Joseph, for the winter.

On the 6th inst. Willie, seventeen-year-old son of Captain Harrison Miller, of Point Betsy life station, was drowned by capsizing of skiff, one mile south of the station. He was in the water half an hour. When found the crew worked four hours, trying to resuscitate him by the method taught by the life saving service, but in vain. Captain Miller has the heartfelt sympathy of the entire community in his bereavement.

Tugs Jessie Slyfield, John Cowan, John Smith and Pottawottamie are still in commission. Tug D P. Hall is laid up.

The life saving stations at Frankfort and Point Betsy were closed at noon, December 7.

The small schooner Lenzenia, Captain McCausland, sailed for Sheboygan, Wis., on the 8th. On the same day the schooner Fleetwing, of Charlevoix, lumber laden, passed up.

The body of a woman was found at Bar Lake, supposed to be Mrs. Gallagher, of St. Helens, lost on the Vernon. She was buried at Manistee.

Frankfort pierhead and Point Betsy lights are still burning. BURMEISTER.

ISHPEMING.

The contract for building ore docks at Marquette and St. Ignace has been let to Thomas H. Hamilton, of Toledo. Three docks at Marquette have a capacity of 18,000 tons and will be increased to 33,000 tons. The additional docks at St. Ignace will hold 10,000 tons. The price has not been made public, but it is the largest single contract of the kind ever let. The new docks will be built by the opening of navigation next spring.

KENOSHA.

Special to the Marine Record.

The schooner Olie Oleson which was abandoned by her crew September last and towed into this port by the tug Fred Engle in a waterlogged condition, left here today for Milwaukee in tow of the tug Kitty Smoke, where she will be docked for repairs. C. A. E.

MANITOWOC.

Capt. Peter Campbell and A. D. Hayward of Whitehall have contracted with Henry Berger for the construction of a passenger and freight steamer to ply between White Lake and Chicago. She is to be smaller than the A. D. Hayward. The Hayward draws too much water for the trade. She is to be permanently housed as a freighter and sold if a suitable purchaser can be found.

The new passenger propeller that is being built at Manitowoc by H. Burger for Seymour Bros. is to be 170 feet keel, 30 feet beam, and 12 feet hold. She will run between Chicago and Harbor Springs, making two round trips each week, and touching at Ludington, Manistee, Frankfort, Traverse City, Elk Rapids, Charlevoix, and Petoskey.

ST. IGNACE.

The three men, Juilliretie, Hintz, and Durusseau, who were supposed lost, were found on Little Martin's Island, where they had drifted after their boat had been disabled. They were none the worse for their experience.

THE prosperity of the past season in the carrying business of the great lakes, together with the natural growth of the country north and west of and around them have induced capital to make large investments in floating property. The shipyard on the lakes are entering on a season of unusual activity, nearly all of them having contracts fully upticayophatrecit.

COPPER, TIN, AND IRON.

A despatch from New York says: Reports received at the Metal Exchange regarding the work of the fire in the famous Hecla and Calumet copper mines were of a most discouraging nature. According to these reports the fire has so extended as to destroy the supports in the main shaft, and the walls have caved in for about an acre of the mine. Fire and flames burst up from all parts of the mine, and all hopes of saving the property is said to be given up. A new shaft, from 3,200 to 3,600 feet in depth, will be required to put the ruin in working order, and this will be a process requiring two or three years. It is estimated that last year's yield of the burning mine was 45,000,000 pounds, something like two-thirds of the total yield of the copper mines in the Lake Superior district. London received this latest alarming report this morning, and Chili bars promptly advanced £2 per ton, closing active amid great excitement at £73 5s. spot, and £74 for futures. At the close of the exchange no sellers could be found.

In this city the excitement on the floor of the Exchange was intense, and the market opened with copper strong at an advance of 60 points, or half a cent a pound, for spot, 17.20 to 17.25 cents. For December futures 17.30 to 17.35 was bid; January, 17.40 to 17.50 cents February, 17.55 to 17.60 cents. There were buyers in abundance, but no sellers. At the second call a few odds and ends went for from 17.30 to 17.45 cents for December futures, and 17.50 cents for January. The same bid was refused at the close, and 17.65 cents for February, which closed with buyers at 17.70 cents. For March and April at the close 17.75 was bid and refused.

Tin was more active but easier at 35 to 35.40 cents for spot and 32½ to 33¼ cents for futures. Lead was irregular, closing firm at 4.85 cents per pound.

A dispatch from Philadelphia, received from the exchange, was to the effect that the iron business was unsettled and there was little chance of any business being done until after Christmas.

REDUCED RATES FOR HOLIDAYS.

The Lake Shore will sell round trip tickets to local points on its line December 24, 25, 26, 31, and January 1 and 2, at one fare for the round trip; limited to January 3, 1888 for return.

THE LOG BOOK.

The propeller Oneida will try the Grand Haven route this winter.

Chicago will winter 130 grain vessels this winter, with a capacity of 5,800,000 bushels, which is 2,000,000 more than last winter's fleet.

The propeller Ontario at Port Arthur repeats the story that the propeller Gogebic is ashore in Jackfish Bay, and it is quite possible that she left McKay's after she was reported safe there.

Captain Eber Ward will probably send a tug to mud Lake to try and release the Fisk, as she has 850 tons of copper for Buffalo and Cleveland that will have to be hauled to the Sault by sleighs and shipped by railroad unless she is released.

A VERY pertinent paragraph in President Cleveland's message to congress says that the amount of money annually exacted, through the operation of present laws, from the industries and necessities of the people, largely exceeds the sum necessary to meet the expenses of the government. Let us then have some of this abundance expended in improving and deepening lake harbors and rivers.

THE GULF STREAM REVERSED.

A remarkable Gulf Stream phenomenon was observed on board the steamer Eureka, which arrived here from New Orleans. Her commander, Captain R. B. Quick, reports that he "found the Gulf Stream current setting to the westward one knot per hour along the Florida reefs until passing Carysfort." Thence, through the Florida Straits, until reaching latitude 30 degrees north, the Eureka had a northerly current of one and a half knots per hour, and thence to Cape Hatteras she had no current at all, though the vessel was in the stream. On leaving the stream at Hatteras the temperature of the sea fell from 72 degrees to 52 degrees in the ship's length.

This extraordinary reversal of the most powerful of ocean currents was due to the great anti-cyclone of high atmospheric pressure which was hovering over our Atlantic coasts at the close of last week. The northerly and northeasterly anti-cyclonic gales swept the Gulf Stream back upon its reservoir in the Gulf of Mexico. But the effect of these gales was probably limited to the surface water and extended but a few fathoms downward, the main body of the stream, more than one hundred fathoms deep, maintaining its momentum.

Captain Quick's record of the Gulf Stream's eccentricities is very instructive, as it shows the navigator when off our Atlantic coast what winds and weather he may expect for some days ahead. When the regular northerly flow of the current is unusually high the indications are that southerly gales will prevail, but when the current is reversed the seaman has the best right to look for northeasterly gales from Florida to the Virginia coast.—New York Herald.

THE WATER CYCLE.

A Michigan genius has invented this machine. He believes it will prove to be of great utility when it has come into general use. And, besides, he thinks it will help to save many lives in case of shipwreck. Time alone can determine the value of the contrivance, but in the meantime it will be considered by most people simply an ingenious toy. It is designed to run equally well on land or water, and its inventor contemplates making machines of such size as to require the use of steam for their propulsion.

Should a wreck be reported on sea or lake the water cycle will at once steam along the coast till near the vicinity of the wreck, when the machine will take to the water as naturally as a duck. When the wreck is reached a load of passengers or crew is taken ashore and the operation is repeated till all are saved. But one machine of this sort has been built and it was propelled by man power when tested. Its wheels are fourteen feet in diameter.

FOR SALE.

TWO STEAM FERRY BOATS—Will carry fifty passengers each; also, good-will and dock privileges. These ferry boats are operated on a ferry line that will clear $1,500 a year. As party interested is not a practical marine man and is engaged in other business, offers for sale entire business or will sell one-third interest to capable party to take full charge of same. Price, $3,900. $2,000 cash; balance on time. Write for particulars. Address MARINE RECORD, Cleveland, O.

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PROPELLER TOLEDO—About 700 tons capacity. Apply to EBER WARD, 51 Griswold Street, Detroit, Mich.

FOR SALE.

FOR SALE, and must be sold quick—Too many partners.
Propeller Benton, A2. Average load, 300M. $28,000.
Barge Midnight, A2. Average load, 385M. $8,000.
Barge Roscius, B½. Average load, 6,000M.
Terms to suit purchasers if parties good. For further particulars, address,
N. D. FISHER, Cleveland, O.,
E. J. VANCE, Bay City, Mich.

NOTICE TO SEAMEN.

FOR the past three years a school has been in operation in Buffalo, under the endorsement of the Lake Carriers' Association, also the Board of Lake Underwriters, and also the Cleveland Vessel Owners' Association, for the purpose of interesting masters and mates in that branch of navigation suited to the lakes, and to prepare young men to pass an examination by the United States local inspectors for first papers, and fit them for promotion as masters and mates. It is proposed to open the school in Buffalo and Cleveland, at the commencement of January, 1888: for a term of three months. Terms of the course, Ten to fifteen dollars. Applicants for tuition will find a list at Upson & Walton's and J. W. Grover & Sons, Cleveland, O, and at the Lehigh Building, cor. of Seneca and Main streets, Buffalo, N. Y.
BRADFORD & BAXTER.

WHAT GOOD ARE THEY.

Our government's revenue cutter Fessenden lay in mid stream off the foot of Woodward avenue all Thanksgiving day. She was in holiday attire and her flags stood out proudly in the piping northeasterly gale. The gilded figure head, the glistening row of muzzles and snugly stowed sails gave her an appearance of entire neatness. Below, the officers were eating turkey with a relish of rare wine, cracking jokes and giving thanks that their lot was no harder. Above lounged scores of able seamen, ready to do anything to vary the monotony of easy inactivity.

This is one picture of sailor life; here is another.

That same merry gale which made the Fessenden's flags stand out proudly was the cause of a different scene down in Lake Erie. Here it whistled through the disordered rigging of a wreck. A schooner was pounding to pieces on the treacherous reef outside Point au Pelee. Five of the crew were swept into the water. Two more were lashed in the rigging, appealing vainly for assistance. Every wave swept the deck and seemed to reach up eagerly for the two victims.

But these two widely differing pictures are directly connected.

The Fessenden could have been alongside this vessel in distress within three hours from the time of starting. She is provided with every modern appliance which a lavish government can supply to assist in life saving. One of her staunch boats could have defied that fearful storm off Point Pelee. But the Fessenden did not start. The Thanksgiving meal continued, and so did the wails of distress.

When word first reached the city early in the afternoon of Thanksgiving day. Captain Westcott hurriedly sought to secure aid for the imperiled crew. Collector Campau suggested that the Fessenden should go. Thereupon Captain Westcott penned a hurried note to the commander of the revenue cutter and sent it aboard. It was substantially this:

Commander Fessenden:

Sir: A vessel is in distress off Point au Pelee. The crew are in the rigging, and the waves threaten to wreck the vessel and carry down the men. Assistance is needed. Will not the Fessenden render aid. J. W. WESTCOTT.

There was no reply to this. The flags flapped on and the gilding glistened. Still there was hope she might wake up. Those anxiously striving to get some help to the wrecked crew saw with gladness that the cutter was finally steaming up. A puff of smoke came from her pipe, the anchor was weighed. She started, and the watchers waited to see her turn and steam down the river. But she kept on. It was only a false alarm. She moved lazily to a coal dock. The wrecked sailors were still in the rigging.

There may be a reason for this inaction. It is said that a law prevents ship-wrecked sailors from being rescued in Canadian waters by an American craft. Perhaps it was this and no. the Thanksgiving dinner. If it was, then it is the law which causes this grave inhumanity to the lake sailors.—Detroit Free Press.

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The publishers of *Housewife*, the popular illustrated home monthly, to introduce it into new homes, make this liberal offer: The person telling us the longest verse in the Bible before January 15th will receive a **Gentleman's WATCH** worth $75, **Solid Gold,** Hunting Case, Stem winder. If there be more than one correct answer, the second will receive a **Lady's WATCH** worth $60, **Solid Gold,** Hunting Case, Stem winder, the third a **Gold Watch,** Hunting case, Stem winder, worth $40, the fourth a **Solid Silver Watch** worth $25. Each of the next 20 a handsome open face **Nickel Watch** worth $10. Enclose 24 cents with your answer for which we will send you *Housewife* each month for 6 months. Remit by postal note, silver or stamps. Name this paper. Address **HOUSEWIFE PUB. CO., Greenfield, Mass.**

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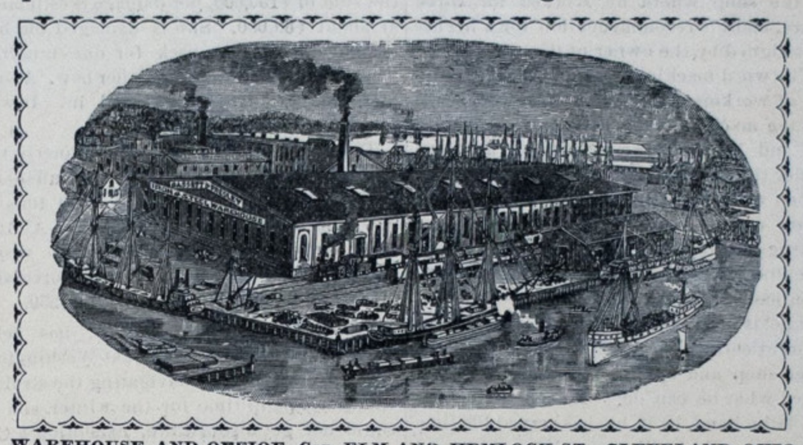

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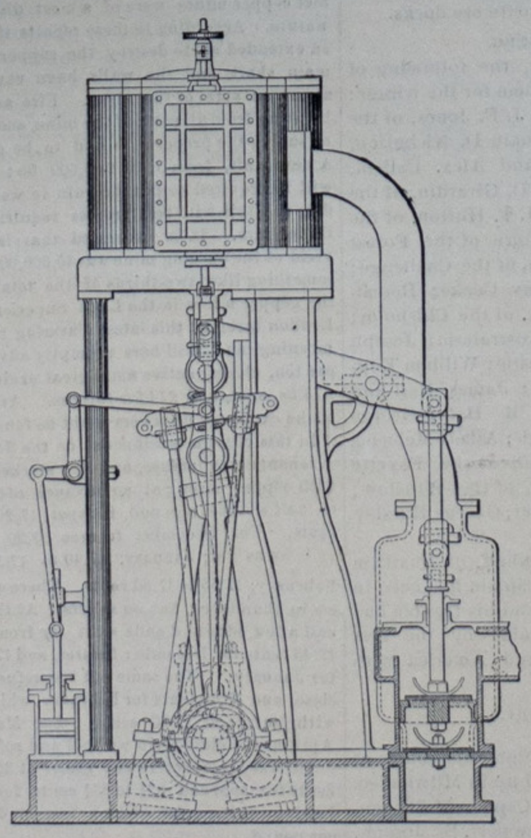

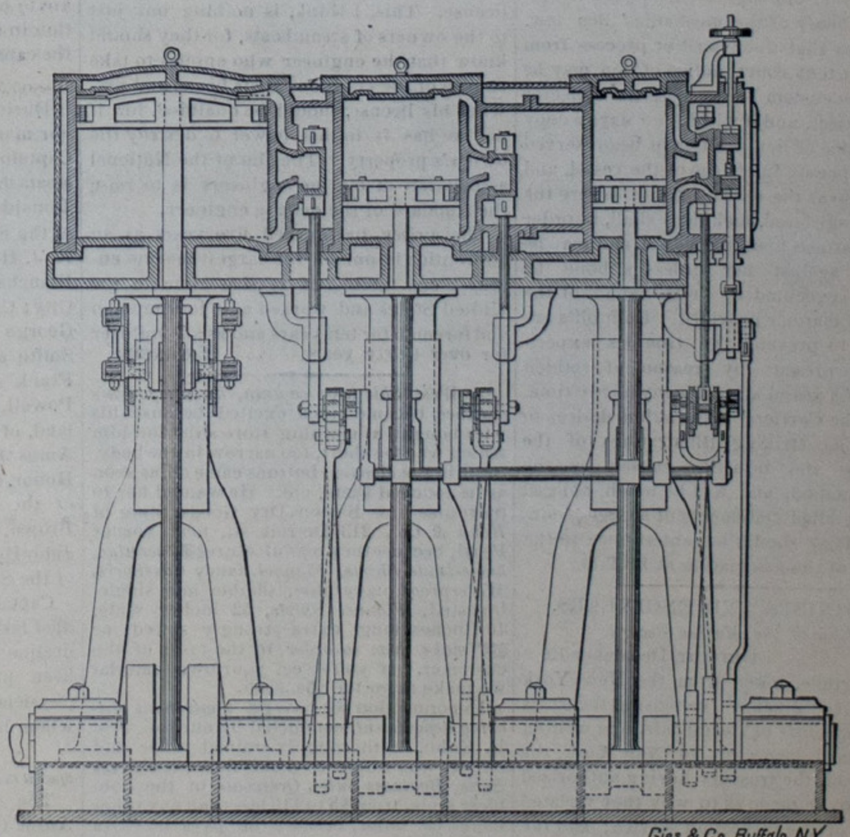

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Commencing Monday, May 16, 1887. The time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	*2 55 A M	*2 55 A M
No 8, N. Y. B & A Express	*8 30 A M	*8 55 A M
No 26, Elyria Accommodation	†7 45 A M	
No 24, Buffalo Ac'm via Sandusky	†10 05 A M	†10 15 A M
No 24, Toledo Accom via Nor	†10 05 A M	†10 15 A M
No. 10, New York & Boston, "F		*11 35 A M
No 12, N Y & B Fast Expr	*2 20 P M	2* 45 P M
No 2, Night Ex via Nor	9 40 P M	†10 00 P M
No 22, Night Ex via San ky	*9 40 P M	
No 26, Conneaut Accomm dation	*4 25 P M	

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*12 15 A M	*12 15 A M
No. 23, Cleveland Express	*2 15 A M	
No 3, Chicago Express via "	5 40 A M	5 55 A M
No 25, Mich Accom Norwalk		†5 35 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	*10 50 A M	*10 55 A M
No 9, Chi Pac Ex via Norwalk	*6 55 P M	*7 15 P M
No 31, Elyria ac to Elyria only		†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	

Sunday train for Nottingham—Depart 8:15 a. m and 1:45 p. m.; returning, leave Nottingham at 8:50 a m, and 3:45 p. m.

Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.

A local Cleveland and New York sleeper, also sleeper for Boston, and dining car daily on No. 10, leaving Cleveland at 11 35 A M.; arrive Grand Central depot, New York, 7.30 a. m.

For full information as to trains and connections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

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Compound Marine Engines, Cylinders 12 and 20 by 16 stroke.

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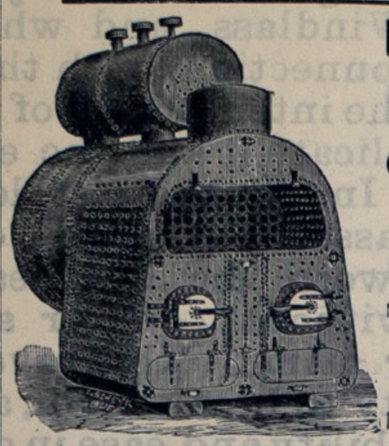

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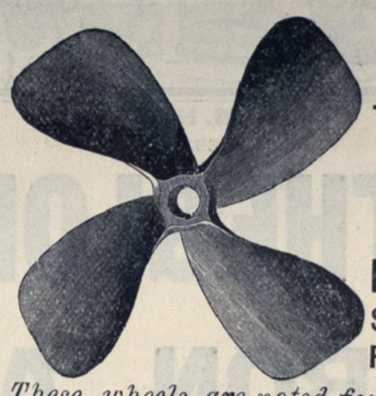

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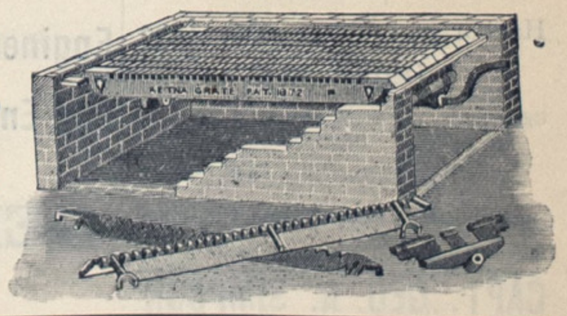

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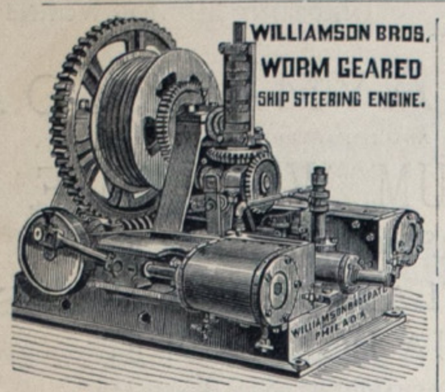

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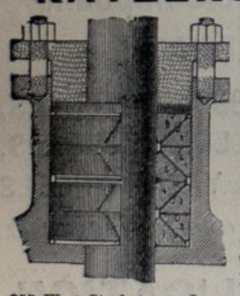

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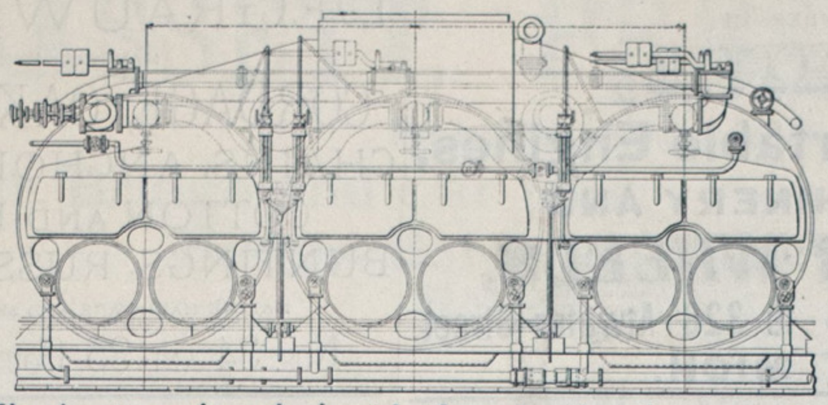

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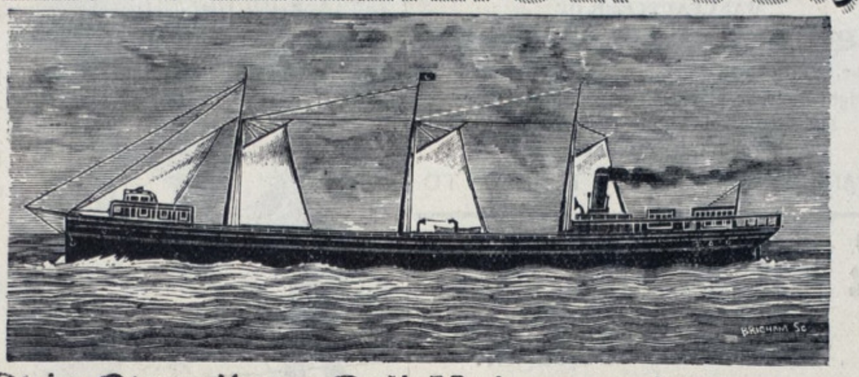

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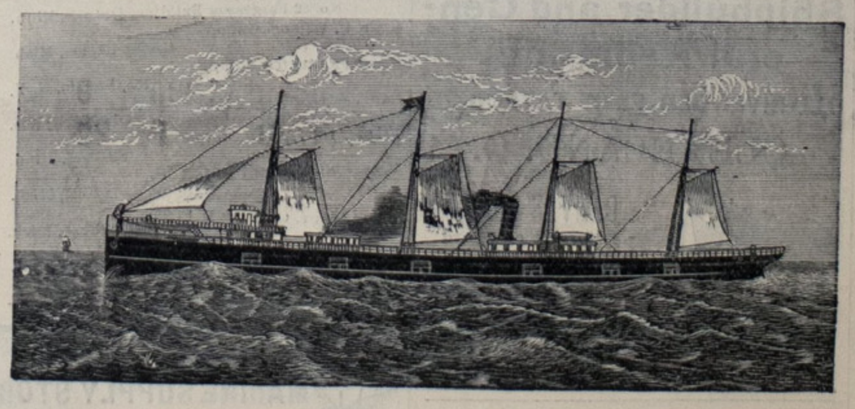

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